

**Generational Differences in Work Values, Work-Related Outcomes
and Person-Organisation Values Fit**

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1.0 INTRODUCTION

The understanding of employee behaviour and motivation has long been a topic of interest for managers, researchers and organisational development experts as they seek to maximise human potential and minimise risk (Spector, 2003; Vroom, 1964). In particular, an increasing number of human resource specialists, sociologists and scholarly researchers are focusing on how to manage and work with people from multiple age groups or different generations in the workplace (Ali, 2002; Gephart, 2002; Grossman, 2005; Jennings, 2000; Karp, Fuller, & Sirias 2001; Kupperschmidt, 1998; Losyk, 1997; Loughlin & Barling, 2001; Mackay, 1997; Reynolds, 2005; Smola & Sutton, 2002; Zemke, Raines & Filipczak, 2000).

A workplace generational group can be defined as an “identifiable group that shares birth years, age location, and significant life events at critical developmental stages, divided by five to seven years into first wave, core group, and last wave” (Kupperschmidt, 2000, p.66). A generation group, often referred to as a cohort, includes those who share historical or social experiences, the effects of which are relatively stable over the course of their lives (Smola & Sutton, 2002). These experiences distinguish one generation from another and help to define feelings towards work and values regarding work (Jurkiewicz & Brown, 1998; Kupperschmidt, 2000).

Values define what people believe to be fundamentally right and wrong and are essentially what guide action (Dose, 1997). George and Jones (1997) defined work values as a generalised framework about what is desirable and undesirable in an organisational context. Work values are also considered to be enduring and stable beliefs which develop through external influences such as social events, and provide a motivational basis for behaviour (Dose, 1997). Due to different historical upbringings, generational groups have been said to have

different reported values such that interactions between these cohorts can often lead to misinterpretations and problems in communication (Fyock, 1990).

As well as generational groups differing according to work values, there has been increasing interest in the effects of age on three work-related outcomes including job satisfaction, organisational commitment and intention to leave the company. For instance, studies investigating the relationship between age and these outcome variables have consistently reported differences between cohorts (e.g. Finegold, Mohrman & Spreitzer, 2002; Fox, Geyer & Donohue, 1994; Riordan, Griffith & Weatherly, 2003; Sparrow, 1996). As much of this previous research has used chronological age as a predictor of job satisfaction, organisational commitment and turnover intentions, there has been little emphasis on how particular generational groups may vary according to these outcomes. Such differences in these work outcomes could also help further explain possible conflicts or stereotypes between age cohorts.

Adding to this complexity, while generations may hold particular sets of work values, organisations are also said to possess and communicate a number of values (Miller & Yu, 2003). This brings about the notion of person-organisation (P-O) values fit which involves a process of matching an individual's own values with the values of their organisation (Kristof, 1996). The 'Theory of Work Adjustment' (TWA) (Dawis & Lofquist, 1984) helps to explain this process of 'fit' and is based on the idea of correspondence, where the individual brings skills and values to the environment and the environment imposes conditions and rewards. An ideal outcome would be one in which both parties share similar values and are happy with the exchange leading to job satisfaction and organisational commitment (Hambleton, Kalliath, & Taylor, 2000; Meglino, Ravlin, & Adkins, 1989). Conversely, if there is poor perceived fit or negative correspondence

between individual and organisational values, this is said to result in negative outcomes such as turnover (Kristof, 1996).

In particular, an organisations' founders or key members tend to define the culture of the organisation based on their collective values (Enz, 1988; Rousseau, 1990; Schein, 1992). If there are differences between cohorts according to work values, and these influential individuals are from a particular generation, then such values are likely to fit with those of employees from that same generation, but are likely to have less of a fit with the values of employees from other generations (Mannheim, 1952). As different generations move into leadership positions, organisations may be influenced by changing value systems which may have major implications for corporate culture (Judge & Bretz, 1992), ethical issues (Dose, 1997) and the success or failure of human resource initiatives (Jurkiewicz, 2000).

The present study aimed to examine differences in work values between generational groups, and assess whether these groups vary according to work-related outcome variables such as job satisfaction, organisational commitment, and intention to leave. The degree of fit between each generation's work values and their perceptions of their organisation's values was also examined. Based on the Theory of Work Adjustment and other related P-O values fit research, a model of overall fit and outcomes (job satisfaction, organisational commitment and intention to leave) was tested and assessed for variation across age groups. It is hoped that knowledge of such differences, if they exist, will support human resource professionals and organisational managers to meet the needs of different generations at work.

1.1 Why Study Generational Differences in New Zealand?

The current workforce comprises of four distinct generations including: (1) 'Matures' (born between 1925 and 1945); (2) 'Baby Boomers' (born between 1946 and 1961); (3) 'Generation X' (born between 1962 and 1979); and finally, (4) 'Baby Boom Echo' (born between 1980 and 2000) (Lyons, 2004). The New Zealand Department of Labour (2004) reported that finding quality candidates will be one of the most critical challenges that New Zealand businesses will face in the future. Moreover, in a recent issue of The Main Report Business Publication (2005), it was suggested that by the year 2011 the 45-plus age group will account for 42% of the workforce, up from 27% in 1991. A study looking at work-related attitudes in New Zealand showed that a significant number of workers were contemplating full-time work beyond the age of 65 (McGregor & Gray, 2004). Other recent business and academic reports have noted the importance of attracting and retaining employees due to the current tightness of the labour market (e.g. Close, 2005). These findings highlight the importance of determining what motivates employees of different age groups in order to enhance satisfaction and meet employment needs.

It has been suggested that the meaning of work has significantly changed over time and that this has implications for how to manage various age groups (England, 1991; MOW International Research Team, 1987). There has been a departure from the traditional Protestant Work Ethic, which arose in the 16th Century and glorified the notion of hard work and the accumulation of wealth and formed the basis of many modern Western work values (Bernstein, 1997; Harding & Hikspoors, 1995; Weber, 1958). In 1991, Ruiz-Quintanilla and Wilpert conducted an extensive literature review into historical individual work value changes. Even at this time, over a decade ago, it was suggested that people were putting less emphasis on work

than in previous years. The authors concluded that the notion of work centrality is closely tied to societal influences and historical events. Smola and Sutton (2002) also found in a longitudinal study that values changed significantly between age cohorts over a 25 year span, suggesting that there was a 'decline' in the hard work ethic over the period examined.

Businesses are now responding to such changes in societal culture (Neal, 1999). There is a strong focus on work/life balance due to the perceived prevalence of work stress and increasing interest in health and well being (Cotton, 2003; Michie, 2002). This phenomenon is reflected in recent changes to New Zealand workplace legislation in which workers can hold their employers accountable for stress experienced from work (Health and Safety in Employment Amendment Act, 2003). Aligned with this focus is the movement towards corporate social responsibility, in which businesses are tending to publicly adopt values and policies that embrace society and the environment (Neal, 1999).

Additionally, the mode through which work is conducted is also changing at a rapid rate. The presence and extensive use of computers and other electronic media forms is one of the defining aspects of work, requiring employees to continuously learn new skills to respond to such changes (Rice & Gattiker, 2001). This influx of technology is transforming the nature and temporal aspects of work, influencing the structure and meaning of the workplace and also human relations (Gephart, 2002). The increasing prevalence and importance of electronic work to help businesses remain competitive requires constant adaptability from employees.

Considering these changes to the meaning and method of doing work over time, and the fact that members of each generational group were introduced to the work environment at differing points in history, then it can be expected that some work value differences may exist between different age groups. For instance, Evetts (1992) commented that individuals in

particular birth cohorts tend to develop their professional identities and preferences under different social and economic conditions. Scandura and Lankau (1997) also noted that as two-career and single parent families are common today, young men and women are likely to have different views regarding work/life balance than their parents' or grandparents' generations.

As employers have finite resources with which to compete for talent, they must understand the values of different generations in order to attract employees, enhance communication, meet diverse employee needs and improve retention. Most of the attention given to generational differences in work values has been anecdotal or stereotypical in nature. The few studies that have been conducted have tended to be confounded by methodological limitations including inconsistent labelling of generational groups (e.g. Kupperschmidt, 2000; Loughlin & Barling, 2001; Santos & Cox, 2000; Schaeffer, 2000), studies being restricted to the United States or Europe (e.g. Barnes, 2003; Cherrington, Condie & England, 1979; Eslinger, 2001; Zemke et al. 2000), a focus on participants from single organisations (e.g. Jurkiewicz, 2000; Lyons, 2004), and examination of a restrictive number of work values (e.g. Miller & Yu, 2003; Smola & Sutton, 2002).

A review of the literature was conducted to provide background for the present study. This included: (1) a summary of the values literature, with a focus on definitions, measurement and importance of work-related values; (2) a theoretical background of generations in order to understand their manifestations, complexities, and challenges; (3) a review of the popular depictions of the generations that currently exist in the labour force and age-related work values findings in order to generate an overall portrayal of the generations from a research perspective; and (4) an overview of the research linking age and work-related outcomes. Finally, the concept of P-O values fit is addressed and how this may differ across age.

1.2 Values

1.2.1 Definitions

A review of the literature revealed agreement that a value is: (1) a belief; (2) linked to desirable states and behavioural conduct; (3) consistent across different situations and events; (4) a guide to a person's experience or evaluation of other people, behaviour and events; and (5) ordered by importance relative to other values to form a prioritised system of values (Dose, 1997; Schwartz, 1992, 1994; Stern, Dietz & Guagnano, 1998). A succinct definition was provided by Rokeach (1973, p.5) who said: a value is "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) also differentiated between instrumental values (modes of conduct) such as moral/competence values (e.g. ambition), and terminal values (end-states) which are personal/social values (e.g. comfortable life). Central to the definition was that particular values affect behaviour in varying ways and at differing times according to situations and events (Elizur & Sagie, 1999).

Values can be distinguished from several related but distinct categories. For instance, values are different from social norms. A value may refer to a mode of behaviour, transcends specific situations, and is personal and internal, whereas a social norm only refers to a mode of behaviour, is a prescription for how to behave in a specific situation, and is social and consensual (Rokeach, 1973). Values are also distinct from attitudes. For instance, values are not bound to situations or events like attitudes, and people tend to have fewer core values than attitudes (Dose, 1997). In addition, values are said to influence attitudes, and be consistent over time and situations as well as being closely linked with motivation and outcome behaviour (Rokeach, 1973).

As a result, values are defined as general principles for guiding action, rather than being specifically linked to certain situations like attitudes and social norms. Hence, it is possible that values may be more appropriate to study than attitudes or norms as they are more generalisable to other areas of life and because they form the basis for motivation. As various types of values are said to guide action in different ways depending on the context, it is important to study how work values influence behaviour and motivation in organisational settings.

1.3 Work Values

1.3.1 Definitions

There are several views concerning the link between personal values and work values. One school of thought is that values have a particular cognitive structure which produces a structural similarity between personal and work values (Elizur & Sagie, 1999). Another view is that work values emerge from the projection of personal values onto the work domain (Ros, Schwartz, & Surkiss, 1999). Overall, work values are fundamental characteristics that both individuals and organisations hold and use as a basis for appropriate behaviour and conduct (Finegan, 2000). George and Jones (1997) defined work values as a framework for what is important to a person in the organisational environment and what is fundamentally right and wrong. This framework develops over time through an individual's experiences and allows an understanding of the type of actions which are broadly desirable and undesirable (George & Jones, 1997). Work values can be defined as permanent guides for experience, allowing various actions to be evaluated and meaning to be given to particular work experiences.

Dose (1997) suggested that work values vary along two distinct dimensions. Firstly, the moral element concerns how much a certain action is deemed 'right' or 'wrong' and, secondly the degree of social consensus about a value implies that some values are considered more desirable or important either by society, a group or the organisation. These two dimensions result in a four-way categorisation used to describe work values which include: (1) the social-moral quadrant; (2) the personal-moral quadrant; (3) the personal-preference quadrant; and (4) the social-preference quadrant. Similar to Rokeach's (1973) definition of personal values, Dose's (1997) framework suggests that different types of work values have distinct influences on work behaviour depending on how each value is viewed within the organisation or group.

1.3.2 Structure and Measurement of Work Values

Many attempts have been made to define, classify and measure work values (e.g. Elizur, 1984; Gay, Weiss, Hendel, Dawis & Lofquist, 1971; Lyons, 2004; Super, 1970). The most widely used approach categorises work values as intrinsic or extrinsic to the individual (Elizur, 1984; Herzberg, 1974; Lyons, 2004; Super, 1970; Wollack, Goodale, Witjting & Smith, 1971). According to George and Jones (1997), intrinsic work values refer to outcomes that come about through the process of work and are dependent on the content or type of work done (e.g. intellectual stimulation). Conversely, extrinsic work values are end-states that occur as a consequence of work and which are largely independent of the content of the work (e.g. job security). Using Rokeach's (1973) conceptualisations of personal values mentioned earlier, intrinsic values could be compared with instrumental values or modes of conduct, whereas extrinsic values could be likened to terminal values.

Several researchers have questioned the adequacy of this two-way categorisation (Dyer & Parker, 1975; Sagie, Elizur & Koslowsky, 1996). For instance, Billings and Cornelius (1980) noted the lack of consistency in the ways in which researchers classified work values into these two domains, and suggested that the use of only two categories was a limited way to define such a large field. As a response to this, the initial extrinsic/intrinsic dichotomy was extended to include altruistic or relational values such as 'making a contribution to society through work' (e.g. Alderfer, 1972; Borg, 1990; Crites, 1961). One example of this three-way categorisation is Elizur's (1984) 'Work Values Questionnaire' which distinguishes between work values that are 'instrumental' or extrinsic (e.g. pay), 'cognitive' or intrinsic (e.g. using abilities at work), and 'affective' or altruistic (e.g. doing work that is consistent with moral values). The structure of this scale has been consistently replicated across numerous studies (e.g. Elizur, 1984; Elizur, 1987) as well as cross-culturally (Borg, 1986; Elizur, Borg, Hunt & Beck, 1991; Selmer, 2000), and has shown consistency across gender (Elizur, 1994). This scale formed the basis for the measurement of work values in the present study and more details are provided in the Method section.

Ros et al. (1999) reviewed the work values literature and concluded that 'intrinsic' work values could be further divided into 'prestige' or 'status'-related items. Using Elizur's (1984) scale as an example, they divided the 'cognitive' facet into 'intrinsic' and 'prestige' items. Ros et al. (1999) suggested that the distinction between these values is linked to definitional issues in which intrinsic work values (e.g. meaningful work) are values that essentially contribute to personal and professional growth, whereas status values (e.g. recognition) tend to arise out of a comparison between the self and others which implies personal prestige. Schwartz (1999) also noted the importance of including a status-related factor in addition to intrinsic, extrinsic and

affective items as a result of an extensive study of work values across 49 nations. Hesketh (1982) also found a power/status factor which explained a large proportion of the variance in Super's (1970) 'Work Values Inventory' on a New Zealand sample, further supporting the importance of including this dimension in the measurement of work values.

However there have been a number of issues with the scales used to assess work values. In particular Macnab and Fitzsimmons (1987) noted that many of the work values scales measure similar constructs and suggested a need for convergence to allow parsimony and consistency in the field. Additionally, the language used tends to be history bound making the scales less generalisable and applicable to contemporary audiences. Finally, the work values measured tend to be rather restrictive and fail to cover items which may be more relevant to present day work.

As a response to this, recent scales have been developed to identify additional values that represent changes in the meaning of work over time, especially related to the growing importance of freedom and work/life balance and social/friendship values. Lyons (2004) devised a 31-item scale which aimed to integrate the concepts arising from the vast number of work values measures in the literature, and also add some contemporary work values relevant to current investigations. The scale showed a 6-factor solution which supported the four-way classification of intrinsic, extrinsic, status and altruism-related values consistently reported in the literature, and added 'freedom' and 'social' related work values considered to be more relevant to present day work. More details of this scale are provided in the Method section.

1.3.3 Relevance of Values to the Study of Work

Values have become an important aspect of the study of work for a number of reasons. Firstly, values have been linked in vocational psychology to preferences for different work environments (e.g. Pryor 1979; Super, 1970). The vocational stream of research describes why and how individuals make important decisions about their jobs, careers and occupations. The overall focus is on increasing satisfaction through the appropriate matching of an individual's personality, abilities, values, motivation and job interests (Dawis, 1991). A large number of measures have been developed to assess vocational choice (e.g. Gay et al.'s 'Minnesota Importance Questionnaire', 1971; Super's 'Work Values Inventory', 1970; 'O*NET Occupational Information Network', 2000), and the majority of these include work-related values.

Secondly, values have been used to examine intergroup differences in the workplace. For instance, several studies have found women to be more interested in social (e.g. fair and considerate co-workers) and intrinsic (e.g. personal development) values than men, whereas men have been found to place more value on extrinsic and status-based values such as pay (e.g. Elizur, 1994; Murphy 2000; Neil & Snizek, 1987; Sagie et al., 1996). However, other studies have revealed no such differences (Rowe & Snizek, 1995), or conflicting results (Harris & Earle, 1986; de Vaus & McAllister, 1991). With regard to other demographic variables, Cherrington et al. (1979) found that age correlated with several work values such as pride in craftsmanship, with older workers placing greater value on pride in their work than younger workers. Other research has investigated work values across cultures (e.g. Elizur, 1994; Schwartz, 1999), finding cultural differences in values such as individualism and collectivism (e.g. Kolman, Noorderhaven, Hofstede & Dienes, 2003; Triandis, 1995).

Thirdly, work values have been said to predict aspects of work performance (Shapira & Griffith, 1990). For instance, Merrens and Garrett (1975) and Greenburg (1977) found that effort and performance on a repetitive task were positively related to the Protestant Work Ethic comprising hard work, dedication and sacrifice. Shapira and Griffith (1990) found that performance ratings for engineers and managers were related to intrinsic work values such as 'activity' and 'pride in work', while the work values predicting performance for production and clerical workers were extrinsic factors such as 'status' and 'earnings'. This suggests that work values may influence job performance differently across particular groups (Miller & Yu, 2003).

Work values can also influence work-related attitudes. Personal values have been shown to influence both corporate strategic (Guth & Tagiuri, 1965) and managerial decisions (England & Lee, 1974) and have been said to predict individual level outcomes such as organisational commitment. For instance, Koslowsky and Elizur (1990), Putti, Aryee and Liang (1989) and Finegan (2000) all found that intrinsic work values (such as independence and job interest) were more associated with organisational commitment than extrinsic values (such as work conditions) and social values (such as friendly co-workers).

It can be seen from this review that work values can be defined and measured in a number of ways and can influence a range of important work outcomes such as satisfaction with career, job performance and organisational commitment, and can also be experienced by different groups in various ways. Individual and group differences in work values are therefore important areas of study if organisations are to be able to attract and retain the best employees. The next section will discuss generational groups in the workplace, followed by a review of information relevant to differences in work values among generations and how this may be related to work outcomes.

1.4 Generations

As the meaning of work changes, different age groups within the workplace are likely to present different work values based on societal influences. Generational cohorts develop values based on historical and social experiences which influence their expectations about organisations, feelings about work and career desires (Kupperschmidt, 2000). In order to understand the logic of classifying a particular age cohort as a 'generation', it is important to consider definitional and theoretical underpinnings to understand how generations manifest and exert their influences within the workplace.

1.4.1 Definitions and Theoretical Background

A generation is defined in chronological and social terms as a group that shares birth years, age location, and significant life events at formative stages (Kupperschmidt, 2000; Lyons, 2004; Smola & Sutton, 2002). Schwartz (1996) described a generation as involving a collective memory between groups of individuals connected by age. Karl Mannheim's essay 'The Problem of Generations', first published as early as 1923 (reviewed in Mannheim, 1952), still remains the basis for most contemporary investigations of generational categories (Eyerman & Turner, 1998; Pilcher, 1994). In his comments on the 1923 essay, Mannheim (1952) stated that individuals who share birth years and experience the same historical period and socio-cultural context during their formative years have a common language and way of experiencing the world, and this creates a generation.

The concept of a 'generation' can help explain why contemporaries of different ages experience the same events differently. Generational theory, as described by Ryder (1965),

distinguishes between 'contemporaries' (people of all ages existing simultaneously at a given point in time) and 'coevals' (people born at approximately the same point in history and who move through life cycles at the same time). For example, individuals who are 'contemporaries' are likely to experience and interpret a historical event in different ways given their different past experiences, while 'coevals' will tend to have a common history as a generation, which may lead them to experience and interpret the event in similar ways.

Mannheim (1952) introduced the term 'generational location' to represent the temporal space of a group moving through their life cycle contemporaneously. However, location in time is not the sole basis for understanding and explaining generations. In addition to sharing the same formative events, coevals need to experience these in a fairly similar context so that the events have shared meaning. Being born in the same historical period and raised in similar social and cultural contexts is a necessary condition for the formation of generational bonds and the development of similar values. Mannheim (1952) also held that a generation will not emerge as a salient social category unless there are some historical events which that age group experienced differently from other generations during formative stages. These conditions are necessary for a generation to form in 'actuality' when social events have differing impacts on individuals at different ages creating age-related social bonds (Eyerman & Turner, 1998; Laufer & Bengtson, 1974; Mead, 1978).

According to Mannheim (1952), the role of social change in generation formation is also said to be crucial. If the pace of social change is too fast this may prevent formation of clear generational identities resulting in a number of small cohorts, each with little clear influence (Lyons, 2004). This gives rise to the notion of 'generational units' which are said to communicate distinct manifestations (Howe & Strauss, 1993; Smith & Clurman, 1997). This

suggests that generations are not homogenous social groupings, but conflict between such units can give a generation distinctive social presence. Adams (1998) has provided evidence that each generation is comprised of a variety of 'tribes' with distinct value sets existing within the broader generational group. Zemke et al. (2000) identified the importance of assessing the 'early' and 'late' periods of each generation, noting that these units had particular value bases. Mannheim (1952) noted the differences between three different types of generational units including: (1) the 'leading' (those people who are supportive of the social and historical trends of their times); (2) the 'diverted' (those who are not supportive of the trends but follow along out of relative indifference); and (3) the 'suppressed' (those who oppose the trends).

1.4.2 The Development of Values in Generational Groups

From the theoretical conceptualisation of generations, it could be expected that through specific developmental experiences, generational differences may be rooted to some degree in value differences. With the complexity of possible influences such as 'tribes' or 'units' within such groupings, it is important for each generation be significantly different from its predecessor, and have experienced specific formative events during values development to help the generation form in 'actuality'. While Mannheim (1952) defines how social and historical experiences can play a crucial role in the formation of a generation and its associated values, the theory gives insufficient focus to the roles of life-cycle and career stage and how these may influence the development of a generational group. Using historical studies and social commentary, Cherrington (1980) examined how life-cycle development, social experiences according to career expectations, and historical events may impact on the development of work values across different generational groups. From this, Cherrington (1980) offered three possible

explanations as to why there are differences between older and younger employees in work values.

Firstly Cherrington (1980) noted that perspectives and frames of reference are changed by the experience of growing older. This is in line with life-span theories (e.g. Levinson, 1978; Super, 1980), which suggest that developmental stages occur sequentially throughout life. Based on this, generational groups are likely to experience the same milestones at roughly the same time and these experiences may have consistent effects on value development. Studies investigating the influence of generational experiences and life-span changes have produced mixed results. For instance, Rhodes (1983) reported that work attitudes, values and satisfaction changed as workers passed through different developmental stages, yet Singer and Amramson (1973) found no significant changes in work values over a 12 year period, even though participants experienced life-cycle changes such as adjustments in salary. To add to the complexity, individuals tend to be experiencing milestones at different times, rather than in a predictable and sequential fashion (Lawson, 2001). At present it is unclear whether once developed, work values are relatively stable and enduring over time (Rokeach, 1973), or whether they are affected by work and life-cycle experiences.

Secondly, Cherrington (1980) postulated that older workers received different kinds of training and socialisation than younger workers with regard to career, which is in line with generational arguments based on social experiences. The concept of career is changing where there is a movement away from traditional career stage models, which suggest that career progression parallels various developmental life stages (Finegold et al., 2002). Given today's flatter organisational structures, reduced employment security, and greater labour mobility, there has been the development of the 'protean career' (Hall & Mirvis, 1996). This involves many

cycles of learning and movement across different organisations and may entail restarting careers several times during working life (Lawson, 2001). There is an increasing need for flexibility, adaptability, and constant upskilling which are all likely to influence members of generational groups in differing ways (Finegold et al., 2002).

Finally, consistent with the above argument that different socialisation experiences lead to different perspectives of older and younger workers, Cherrington (1980) suggested that historical or 'generation-specific' events have a strong impact on ones' work values. Cherrington et al. (1979) examined whether work values, specifically linked with the work ethic, were related to age (generation) or other explanatory variables in a sample of 3,053 American workers in 53 manufacturing companies. Overall, older workers placed greater emphasis on the moral importance of work and pride in craftsmanship than the younger workers, while the younger workers placed greater emphasis on the importance of money and having friends and were more accepting of welfare as an alternative to working. The authors concluded that the relationship between age and work values was influenced more by the social and historical context of work than by other extraneous variables such as occupational status.

In support of this, after controlling for life-cycle variables such as marital status, Lyons (2004) found significant generational differences in work values with younger generations valuing status and social-related work values more than the older generations who were more interested in altruistic work values. While controlling for career stage, Howard and Bray (1988) found AT & T managers who entered the workforce at different historical points communicated different attitudes and values based on socialisation experiences. Smola and Sutton (2002) used Cherrington et al.'s (1979) survey and compared data on work values collected in 2002 with

results from a similar study in 1974. It was found that there were significant differences in reported work values between workers of the same age, but 25 years apart.

These studies, and the theoretical argument proposed by Mannheim (1952), suggest that a generation has unique characteristics, which interact with individual development and societal influences, and result in distinct values that are then communicated within the work environment (Schaie & Strother, 1968). This can help describe generational conflict or stereotypes (Harwood & Williams, 1998) and problems with communication between groups. Additionally, due to the changing focus of career and attitudes towards work in the present day, the influence of generation in explaining work values is likely to be significant.

1.4.3 Defining Generational Boundaries

In order to clearly and reliably measure differences in values between generational groups, there must be an indication of where the generational boundaries lie. Mannheim (1952) distinguished between quantitative and qualitative definitions of a generation. Firstly, the qualitative view defines the average period of time that it takes for dominant ideas to form which determines the mean length of a generation. The general estimation of the life span of a generation is approximately 20 to 30 years which links with the biological time span where children succeed their parents in society (Howe & Strauss, 1993). However, this view is oversimplified suggesting that all members of society give birth to children at roughly the same age, which is far from reality.

The quantitative definition of generations originates from the field of demography. Demographers prefer to use the term 'cohort' for a group of individuals within a generational

group, and define boundaries through the analysis of historical birth rates (e.g. Foot, 1998). Despite producing clearly defined boundaries, this approach places too much emphasis on the life-cycle and fails to fully consider the social environment that shapes the meaning of events for generations.

Laufer and Bengtson (1974) proposed three essential criteria for a generational movement to emerge: (1) there is a requirement for the development of new skills; (2) there is an emergence of new social patterns; and (3) values and lifestyles are altered to meet demands. Zemke et al. (2000) defined the importance of 'the feel' as well as 'the face' of a cohort, where a late entry into a generation may identify more with the previous group than their demographically defined category. The notion of 'generational cusps' has been provided by Lancaster and Stillman (2002) as a means of helping to further understand these complexities. They propose that cusp groups straddle the line between generations, sharing values with those slightly older and slightly younger than themselves. This concept appreciates that the generational divide has to be drawn at some point while also accounting for the degree of overlap that exists. It is possible that 'cuspers' can help to liaise between generations, having an appreciation of the values existing on either side and helping groups relate to one another.

Despite these complications, in order to examine generations in research, boundaries must be drawn. The quantitative approach of segregating generations into tightly defined groups appears to favour the 'face' and reject the 'feel' of the age group (Zemke et al., 2000). Despite this, Spitzer (1973) postulated that if age-specific differences are important and significant, these will be revealed regardless of where the lines are drawn on the age continuum. In order to define these generational boundaries it is important to consider the events and circumstances that produce a generation as well as demographically defined age barriers. It is also necessary to

define brackets that align as closely as possible with past studies on generational differences to maintain consistency with previous research.

The labels that society and researchers have given generational groups of the 20th Century lack uniformity, as do the years that each generation covers (Santos & Cox, 2000; Smola & Sutton, 2002; Zemke et al., 2000). For instance, Schaeffer (2000) referred to those born between the years of 1934 and 1945 as the Swingers, Zemke et al. (2000) labelled those born between 1922 and 1943 as the Veterans, while Jurkiewicz and Brown (1998) and Santos and Cox (2000) named those with birth dates between 1925 and 1942 as the Matures or Traditionals. However, there is general agreement that the first significant generational boundary in today's workforce comprises those with birthdates in the early to mid 1940s, corresponding with the end of World War II when there were significant social, economic and historical changes (Lyons, 2004).

Smola and Sutton (2002) noted that the two generational groups that are most prevalent in today's workforce are often called the Baby Boomers (Boomers) and Generation X (Xers). The literature seems to be relatively consistent in the labelling of these two groups. The generational boundary for the birth of the Baby Boomers is generally set in the early to mid-1960s as this coincides with the decline in birth rates that signalled the end of the Baby Boom, but there are no clear events to separate the Boomers from Generation X. The birth years of the Xers are said to begin in the mid-1960s and to end in the mid-1970s, 1980, 1981, or 1982 (Adams, 2000; Dobransky-Fasiska, 2002; Kupperschmidt, 2000; Loughlin & Barling, 2001).

The generation now entering the work force corresponds with the rise in birth rates in the early 1980s when Baby Boomers began to have children and this has been referred to as the Baby Boom Echo or Echo group (Foot, 1998; Lyons, 2004). This generation has also been

referred to as Generation Y (Loughlin & Barling, 2001), the Millennials (Stockberger, 2003), the Silent Generation (Dobransky-Fasiska, 2002), or Generation Next (Zemke et al., 2000). Much like Generation X this group does not have a clear generational boundary.

In terms of defining the boundaries for the generational groups for the present study, the classification offered by Lyons (2004) has been adopted. Lyons (2004) conducted an extensive review of the literature and set the divide for each generation corresponding to the midpoint between the highest and lowest boundary dates set by the reviewed authors (a review of the various date boundaries and names used to describe generations is provided in Appendix A). This classification and the names used to describe each generation in this thesis are represented in Table 1.

Table 1: Classification of generational groups used in the present study (Lyons, 2004)

Name	Year Born	Age Span in 2005
Matures	Born 1925 - 1945	60 - 80 years
Baby Boomers (Boomers)	Born 1946 - 1961	44 - 59 years
Generation X (Xers)	Born 1962 - 1979	26 - 43 years
Baby Boom Echo (Echo)	Born 1980 - 2000	5 - 25 years

1.5 Generations and Work Values

Overall there is a lack of academic research, particularly in an organisational context, to identify generational differences in work values. Studies have produced mixed results and often resulted in conclusions that are overly stereotypical. In more rigorous studies, researchers have typically only used age in the analysis, which neglects to consider the historical and social contexts and the influence of generational membership as a salient variable. Age-related findings do have a potential to be useful by using the typology presented in Table 1 to identify the relevant findings according to generational groups. What follows is a summary of the stereotypes and anecdotal profiles of each generation under investigation in the present study, and a review of the studies conducted into work values and age in recent years that cover the same generational groups.

1.5.1 Matures: Born 1925-1945

The Matures are currently the oldest members of the workforce, aged 60 years and older in 2005. According to the Statistics New Zealand website, at the time of the 2001 census this group accounted for 15% of the New Zealand Labour Force. Formative defining events included World War II, the Great Depression and the rise of labour unions (Lancaster & Stillman, 2002). From the Great Depression onwards, individuals from the Mature generation have been motivated by job security and benefited from the strong economic activity that marked their entrance into the workforce in the 1950s (Murphy, 2000; Zemke et al., 2000). Being well educated and faced with low unemployment rates, the Matures were well placed to fill the administrative and professional roles that were in high demand in the post-war period (Lyons, 2004).

Work Values of Matures

The stereotyped view of this generation is that of traditional and hardworking individuals (Kupperschmidt, 2000; Zemke et al., 2000). There is some academic evidence to support this depiction of the Matures. For instance, qualitative studies have found that this group places importance on social, family and work values including hard work, loyalty, respect, dependability and persistence, which are similar to the values postulated by the Protestant Work Ethic (Barnes, 2003; Smith & Clurman, 1997; Zemke et al., 2000). Other studies have found that Matures place more emphasis on the moral importance of work and take more pride in craftsmanship than younger workers (Cherrington et al., 1979). A traditional approach to work is valued, where respecting others, sharing knowledge and having comfortable working conditions are important (Eslinger, 2001; Zemke et al., 2000).

The anecdotal literature also suggests that authority and clearly defined roles are of importance to the Mature group (Howe & Strauss, 2000). Through extensive research into the values of generational groups in Canada, Adams (1998) provided some support for this view, in which Matures shared a belief in the values of authority based on the influence of formative events such as the War and the Depression. Further, Zemke et al. (2000), through interviews and qualitative analyses, found that a leadership style which is directive, logical and authoritative tends to be favoured by Matures, and that Matures respected and adhered to an established organisational hierarchy. According to qualitative research performed by Lancaster and Stillman (2002), however, this generation is said to feel frustrated and even offended by what is viewed as an informal approach to work and lack of protocol displayed by younger co-workers, and may hold the view that younger workers need to work their way up the corporation in order to

command respect. This provides some support for the stereotypical view of this generation as having a hierarchical view of organisational structure.

In line with this, Matures are have been found to place importance on status-related work values, not as a means of reflecting wealth but as symbols of achievement of having progressed within the organisational structure through hard work (Adams, 1998). Lancaster and Stillman (2002) and Kupperschmidt (2000) suggested that the primary career objective for this group was to 'build a legacy' of a lifetime career in their organisations or professions where there was a requirement to earn respect through tenure and sacrifice. In support of this, the Mature group has have been found to have high levels of organisational commitment and hold the prominent view of a job as a responsibility rather than an entitlement (Zemke et al., 2001).

Studies have also consistently found that Matures value altruistic work values such as giving back to society (Eslinger, 2001; Lyons, 2004). This may be the result of being more established in their careers and thus having more time to pursue work that is morally fulfilling. For example, Ryff and Baltes (1976) found that as individuals move from midlife to old age, there tends to be a diminution of extrinsic values (such as financial security), and increased importance placed on altruistic values (such as a desire for world peace).

1.5.2 Baby Boomers: Born 1946-1961

Named after the boom in their births in Canada, America, New Zealand and Australia, this generation grew up in optimistic and positive times after a past history of war (Foot & Stoffman, 1996; Kupperschmidt, 2000). As recorded by the most recent census, in 2001 the Baby Boom generation made up approximately 36% of the labour force in New Zealand. In

Mannheim's (1952) terminology, the Baby Boom formed a generational divide in that a massive cohort of individuals shared a relatively small generational location, and so while it is not the largest generation in year span, it is the most densely populated. Baby Boomers differ from the previous generation in a number of ways including a willingness to redefine roles and promote equality, and to challenge the rules in order to meet their needs (Mackay, 1997).

Work Values of Baby Boomers

The anecdotal literature suggests that Baby Boomers are a group of individuals with idealistic attitudes and a strong feeling of entitlement and self-fulfilment and somewhat non-conformist attitudes (Lyons, 2004). In their social commentary, Smith and Clurman (1997) postulated that the improved social security that this generation grew up with led to such values. Zemke et al. (2000) used extensive survey research and provided some support for these stereotypes, where the key values and concerns of the Baby Boom were for personal and social expression. A number of recent studies have found that Baby Boomers rated the chance to learn new skills, personal improvement and creativity at work as being more important than did younger generations (Barnes, 2003; Eslinger, 2001; Jurkiewicz, 2000; Lyons, 2004). In support of this, Taylor and Thompson (1979) compared the work values of Matures and Baby Boomers and found the Boomers to be more interested in 'self-expressive' values involving the opportunity to learn and make independent decisions. However, due to this focus, the Boomers are generally depicted in a negative light in the anecdotal literature where younger generations have been said to view the Boomer group as "self-absorbed and self-indulgent" (Lyons, 2004, p.157).

Research has also found, due to this focus on work as being a means to personal fulfilment, that Baby Boomers tend to report higher levels of job satisfaction and commitment and lower levels of avoidable absence, accident rates and turnover (Jurkiewicz, 2000; Rhodes, 1983). Lancaster and Stillman (2002) noted that, on average, members of the Boomer generation tend to build strong careers in one organisation, recognising constant job changes as a poor career move. Miller & Yu (2003) investigated generational differences in work values in Taiwan and found that Boomers reported being more loyal to their organisations than did younger generations. Collins (1998) reported that importance has often been placed on values related to status and extrinsic rewards to provide recognition for such commitment. However, it has been said that the Boomer group tends to expect the same level of commitment and sacrifice from subordinates, which can lead to inter-generational conflict (Zemke et al., 2000).

The Baby Boomers have often been stereotyped as “workaholics” (Stockberger, 2003, p.1) and as being “relentlessly hardworking” (Lyons, 2004, p. 158), who accept stress as part of work. Some evidence has been found to support these claims where Smola and Sutton (2002) reported Baby Boomers to have the highest levels of work centrality compared to other generations. In addition, Lancaster and Stillman (2002) and Zemke et al. (2000) found that many Boomers viewed workaholism as an honourable trait. However, this strong focus on hard work and achievement means that Boomers may have significantly more difficulty than younger generations in balancing work and family (Zemke et al., 2000). Although there is some recognition of the importance of work/life balance (Cox, 1999), it is said that this is not often adhered to (Lancaster & Stillman, 2002).

Other stereotypes presented of the Boomer group propose that they are community orientated and committed to collaborative work, which suggests a preference for team-based and

democratic environments (Karp et al., 2001). Kupperschmidt (2000) and Zemke et al. (2000) found some evidence for this view where Boomers were highly interested in relationship building and obtaining jobs in certain industries, such as customer service, to allow for people interaction. Other studies have found that good supervisor relations and positive interactions with co-workers are of high importance to the Boomers when compared to other age groups, as emphasis is placed on a collectivistic orientation rather than an individualistic stance (Eslinger, 2001; Karp et al., 2001).

1.5.3 Generation X: Born 1962-1979

In 2001 this group made up a large portion of the New Zealand labour force (43%). This is the generation that grew up during rapid technological and social change, representing financial, family and social insecurity (Lyons, 2004). As a result, it has been said that this group has come to expect change (Stockberger, 2003) and entered the workforce with a frame of reference that did not include job security or a traditional career model as many had experienced their parents being “downsized” (Tulgan, 1995). Increased divorce rates for the parents of this cohort meant that they tended to become self-reliant, turning to friends for support while actively seeking a sense of family (Zemke et al., 2000).

Work Values of Generation X

Overall, the portrait of Generation X painted by the media is negative and highly stereotypical. For instance, a Gallup poll conducted in the United States found that young people of 1989 were described as more ‘selfish’ by the public than young people of 1969 (82% verses

5% respectively) (Gallup, 1990). There has been little research support for this stereotype. Instead, what may be viewed as 'selfishness' in this group, has been defined in qualitative studies as a strong interest in independence and autonomy (Stockberger, 2003). Barna (1992) supported this view after analysing results of telephone interviews with 250 Generation Xers and reported that self-definition and independence on the job were highly valued. Jurkiewicz (2000) found that Xers rated 'freedom from supervision' higher than Baby Boomers. Thus, a sense of individualism over collectivism tends to be favoured by Generation X, in contrast to Baby Boomers (Jurkiewicz & Brown, 1998). This independence and autonomy may be why self-employment and creative roles tend to be favoured by the Xers (Eslinger, 2001; Zemke et al., 2000).

Other anecdotal descriptions suggest that the Generation X group are disloyal to their organisations (Sunoo, 1995). The academic literature has found some support for this claim where Xers have been reported to exhibit lower levels of commitment to their organisation and managers and higher commitment to themselves and their professions (Jennings, 2000; Lyons, 2002; Miller & Yu, 2003). Kupperschmidt (2000) found that temporary alignment with the organisation is favoured by this group, with a preference to work for organisations which value skills and productivity rather than tenure. Survey research has suggested that favourable economic conditions, tight labour markets and a strong internal locus of control result in Generation X tending to change jobs frequently (every 18 months on average) particularly if their demands are not met (Filipczak, 1994; Jennings, 2000). Lancaster and Stillman (2002) suggest that this lack of commitment to a single organisation results from the need to gain experience and remain employable in a competitive market, as there is importance placed on investing in oneself through training and development.

Interestingly, despite being open and adaptable to change, Wah (2000) found that Generation X rated having 'stability' in their jobs as a top priority for their ideal working environment suggesting, that this lack of commitment is not so clear cut. Kupperschmidt (2000) suggested security is valued by this group as they have grown up without this frame of reference. Thus, security may be valued, but possibly not often received.

It has also been suggested in the anecdotal research that Generation X tend to be less interested in hierarchy and seniority than older generations (Adams, 2000). Tulgan (1995) conducted interviews with 84 diverse cohorts of Generation X in terms of gender, ethnic heritage and job experience and found that this group demands competent, credible managers and coaching and mentoring, rather than command and micromanagement. This finding supports other studies which have produced similar results (e.g. Bradford & Raines, 1992; Kupperschmidt, 2000; Zemke et al., 2000). Further, Maccoby (1988) conducted a longitudinal study and found that Generation X desire managers who are open about their own shortcomings and errors. It has been reported that the Generation X group holds a belief that a manager must earn respect through competence rather than their age or title (Sunoo, 1995). Adams (1998) found that Generation Xers view seniority and experience as being weak assets in the current work environment that demands fluidity and change. Thus, status-related work value items may be perceived as less important by this group.

Another clear theme in the stereotypical literature is that Generation X, more than any other generation, aspire to balance work and play (Grossman, 2005). There has been much research evidence to support this claim (e.g. Raines, 1997; Smola & Sutton, 2002). For instance, Farnsworth (2001) and Barna (1992) found that Xers rated family ties and relationships above other values. Also, Burke (1994) found that the Generation X group had more interest in

work/life balance than previous generations. Technology is viewed as a tool to produce more work in less time, supporting a non-traditional orientation towards work hours and a desire for flexibility, as this generation often has sporting, family and education commitments outside work (Stockberger, 2003). In considering rewards and compensation, money is important to Generation Xers, more as a means to freedom, than a reflection of status (Tulgan, 1995). This orientation highlights a key possible difference between Generation X and Baby Boomers where Boomers are said to “live to work” and Xers “work to live” (Zemke et al., 2000, p.99).

1.5.4 Baby Boom Echo: Born 1980-2000

The most recent generation beginning to feature in the workplace, the Baby Boom Echo (Echo) is just starting to produce social commentary on attitudes, values and motivations, particularly in the media (Howe & Strauss, 2000). The most defining formative experience for this group is the growth of the Internet and other technological developments (Lyons, 2004). This generation has witnessed the benefits of having an entrepreneurial spirit and seen how technological skills can make money (Zemke et al., 2000). Other formative events have been the surge of violent actions in the late 1990s and early 2000s. Although the psychological effects of these events have not yet been fully documented, it is likely that they will shape this generation and how it interacts with the world of work. Echo members who have entered the workforce are fortunate to have joined the job market at a time of economic expansion where their technological skills and adaptability are both needed and recognised. According to Smith and Nippert (2005) unemployment in New Zealand is the lowest in 18 years and, at 3.8%, the second lowest in the OECD.

As members of this cohort are just entering adulthood (in 2001 the Echo group only made up 6% of the labour market in New Zealand according to data collected from the census), there has been little opportunity to study their work-related values. Lyons (2004) points out that identifying their values is made even more difficult by the fact that a vast majority of members are still in formative stages which means it may be years before their unique generational values are evident. However, there have been a number of preliminary attempts to predict the values of this upcoming generation.

Work Values of Baby Boom Echo

Anecdotal information reported in popular publications characterise the Echo group as wanting more out of their working lives than any preceding generation (Jennings, 2000). There is some academic evidence that the Echo members will continue to expand on values held by previous generations. Zemke et al. (2000) reported that as well as being technologically savvy, this generation feels a special connection with their grandparents, the Matures, which could result in an orientation towards a stricter moral code, whereby goals will be accomplished by creatively working within the system, rather than rebelling against authority. In addition, building on the values of Generation X, it is likely that the Echos' expectations of work/life balance will be ingrained (Zemke et al., 2000). It has also been suggested that, like Generation X, the Echo group may be more career-loyal and less company loyal, keen to seek employment opportunities that complement life styles, career development and overseas travel (Close, 2005).

Other stereotypical reports have labelled the Echo group as highly materialistic and, as a consequence of being 'connected' to the wired world 24 hours a day, demanding of instant feedback and will tend to seek frequent change and variety in their working lives (Lancaster &

Stillman, 2002; Ryan, 2000). Research studies have found the Echo group to be the most highly educated cohort in history, which possibly leads to higher self-esteem and expectations from life and work (Bibby, 2001; Howe & Strauss, 2000). Other researchers have noted that this generation is self-expressive with a strong desire for freedom of speech (Tapscott, 1998). Lewis (2001) noted that this generation may be the most adaptable yet in terms of technological skills and attitude.

Brandow (2005) suggested in an article on managing the Echo group, that mentoring and coaching are likely to be vital components to the acceptance of any job opportunity. Reynolds (2005) also commented that the quality of the relationships Echos have with their supervisors or managers is particularly important, so that learning is maximised. In terms of research support for these claims, Barnes (2003) found that the Echo group rated mentoring and guidance at work as more important than did the other generations. This also suggests that the Echo group tend to be interested in the intrinsic aspects of their work such as skill development through training in order to remain marketable (Loughlin & Barling, 2001; Lyons, 2004).

Interestingly, research has shown that there may be an interaction between skill use and social communication, where jobs requiring more skills have been related to the development of closer relationships at work (Mortimer & Shanahan, 1991). This links with the point that the Echo group is the first generation to value having fun in working life, so social interactions within the work environment are considered important for this generation (Ryan, 2000; Tapscott, 1998; Zemke et al., 2000). In a New Zealand study, Burgham and Callister (2004) investigated a group they called Generation NXT (aged between 18 and 29 at the time of the study), and found support for this claim, where this group showed a strong interest in community, social interactions and was highly accepting of diversity.

1.5.5 Summary of the Research Findings into Generational and Age-Related Work Values

Based on the anecdotal and age-related evidence presented above, various researchers have noted differences between generational groups according to work values. However, as mentioned earlier, much of this research has been restricted to studies in the United States, based on small sample sizes, and at times, produced conflicting results. Also, much of the research has been from a qualitative perspective, and therefore the domain of work values was not clearly defined.

In an effort to test previous findings (e.g. Adams, 1998; Barna, 1992; Barnes, 2003; Burke, 1994; Eslinger, 2001; Howe & Strauss, 1993, 2000; Jurkiewicz, 2000; Lancaster & Stillman, 2002; Lyons, 2004; Miller & Yu, 2003; Raines, 1997; Smola & Sutton, 2003; Tulgan, 1995; Zemke et al., 2001) and assess the accuracy of anecdotal and stereotypical profiles according to relevant work values, a general broad hypothesis will be tested:

Hypothesis 1: There will be significant differences between generational groups according to work values (extrinsic values, intrinsic values, status values, social values, altruism values and freedom values).

1.6 Generations and Work-Related Outcomes

Not only are different generations likely to vary according to their work values, but they are also likely to differ according to work-related outcomes such as job satisfaction, organisational commitment and intention to leave (Karp et al., 2001; Meyer & Allen, 1997; Rhodes, 1983; Spector, 1997). The interest in this area stemmed from research on motivation, which suggested that individuals of different ages experience such outcomes differently (Sparrow, 1996). Although some studies have investigated how organisational commitment may differ across generations (e.g. Daboval, 1998), little academic research has examined how specific generational groups may differ on job satisfaction or leaving intentions. This section defines the three work-related outcome variables assessed in this study and then briefly reviews the literature linking age with these outcomes.

1.6.1 Definitions

Locke (1976) defined job satisfaction as a pleasurable or positive emotional state that results from one's job experience. Two different approaches have emerged in the measurement of job satisfaction: the composite (facet) approach, and the global (overall) approach. The composite approach, as described by Warr, Cook and Wall (1979), examines facets of the job and involves a distinction between intrinsic satisfaction (feelings about the nature of the job itself e.g. being able to use abilities) and extrinsic satisfaction (feelings about factors external to job tasks e.g. company policy). The global approach measures job satisfaction based on an individual's overall reaction to their job. Job satisfaction has been extensively studied and has been found to be important for the development of other positive outcomes such as improved job performance (Petty, McGee & Cavender, 1984), increased organisational citizenship

behaviour (Organ & Ryan, 1995), and a reduction in withdrawal behaviours such as absenteeism (Tharenou, 1993).

While job satisfaction and organisational commitment tend to be positively correlated and conceptually similar, they have been found to be distinctive constructs, where commitment is said to take longer to develop and be more generalised than satisfaction (Brooke, Russell & Price, 1988; Shore, Newton & Thornton, 1990). Meyer and Allen (1991) proposed three components to organisational commitment: (1) 'affective' commitment, or an employee's emotional attachment to and identification with the organisation, in which they remain in the organisation because they want to; (2) 'continuance' commitment, or an employee's personal awareness of the costs involved with leaving the organisation; and (3) 'normative' commitment, or a feeling of obligation to remain with the organisation possibly due to social or familial obligations. In the present study, affective commitment is examined as it has been most closely associated with the work values literature (Cable & DeRue, 2002; Meyer, Irving & Allen, 1998).

Employee turnover is an extremely costly problem in terms of money, knowledge and the time needed to train new employees (Johns, 2001). Lee (1997, p.97) defines turnover as the "termination of an individual's formal membership with an organisation". The psychological processes underlying turnover have been historically included within a withdrawal model that assumes that turnover behaviour is a product of unfavourable attitudes (Johns, 2001). Leaving intentions are reported to be the strongest predictor of actual turnover, as most employees who intend to leave their jobs, and who feel they have the choice and means to do so, will most likely quit (Griffeth, Hom & Gaertner, 2000; March & Simon, 1958). Intention to leave is assessed in the present study.

1.6.2 Age and Job Satisfaction

Studies have generally shown that job satisfaction and age are related (Spector, 1997). Through a meta-analysis of 19 studies, Brush, Moch and Pooyan (1987) found that age and job satisfaction had a mean correlation of .22. The shape of the relationship between age and satisfaction has also received much research attention. For instance, Rhodes (1983) and Warr (1994) found a positive linear relationship between job satisfaction and age up until the age of 60. Zeitz (1990) provided support for a curvilinear relationship in which job satisfaction declines early in life, levels off at middle age, and then increases after approximately 45 years of age. Others have suggested the relationship is U-shaped (e.g. Clark, Oswald & Warr, 1996). Some explanations have been offered for these dynamics. For instance, older workers are said to be more satisfied as they are more accepting of authority and expect less from their jobs, and it is also thought that older workers have better jobs or more skill than younger workers (Spector, 1987). However, these hypothesised trends have received little research support (Spector, 1997).

With regard to generational differences, Withers (2002) found no differences in job satisfaction levels between Baby Boomers and Generation Xers. However, a specific sample of nurses was used and neither Mature nor Echo groups were included in the analyses, which constrained the number of interpretations that could be made. Based on the age-related findings of the research discussed above, the following hypothesis was tested in the present study:

Hypothesis 2: Older generations (Matures and Baby Boomers) will report significantly higher levels of job satisfaction than younger generations (Generation X and Echo).

1.6.3 Age and Affective Organisational Commitment

Research investigating demographic characteristics in the study of affective organisational commitment has consistently found significant relationships (Meyer & Allen, 1997). Using meta-analysis, Mathieu and Zajac (1990) reported an average, statistically significant correlation of .20 between age and organisational commitment. This relationship persisted, even when variables often confounded with age (e.g. tenure) were controlled for (Meyer & Allen, 1997). Finegold et al. (2002) found that organisational commitment varied across different age groups depending on whether each group was satisfied with various aspects of their jobs (e.g. pay). These authors highlighted the importance of assessing generational effects to understand the subtle differences between groups.

As mentioned earlier, studies have consistently found Baby Boomers to be more committed to the organisation, while Generation X have been found to be more committed to personal development and employability (Daboval, 1998; Karp et al., 2001; Miller & Yu, 2003; Muchnick, 1996; Smola & Sutton, 2002; Zemke et al., 2000). However, little research has included the Mature and Echo group in analyses, restricting the interpretations that can be made. Based on these past studies, anecdotal profiles of the generational groups, and the overall correlation reported by Mathieu and Zajac (1990) using meta-analysis, the following hypothesis is proposed:

Hypothesis 3: Older generations (Matures and Baby Boomers) will report significantly higher levels of affective commitment to the organisation than younger generations (Generation X and Echo).

1.6.4 Age and Intention to Leave

The research into the relationship between age and intention to leave the organisation has produced mixed results. For instance, March and Simon (1958) suggested that when economic conditions are favourable, individuals are more likely to leave the organisation regardless of age. Healy, Lehman and McDaniel (1995) conducted a series of meta-analyses and found that the relationship between age and turnover was small and near zero ($p = -.08$), but did not investigate the moderating effects of the labour market.

However, other studies have found a consistent negative relationship between age and leaving intentions (e.g. Aldag & Brief, 1977; Rhodes, 1983). It has been suggested that as individuals age, fewer job alternatives may be perceived to be available, which results in less job search behaviour and a lower intention to leave the organisation (Riordan et al., 2003; Warr, 1994). Other studies have noted that there can be a stereotype of older workers being less employable, so fewer employment alternatives are perceived to be available elsewhere (Warr, 1994). In addition, in considering the work values of the older generations reviewed earlier, it may be that Matures and Baby Boomers stay in organisations longer than younger generations due to a strong sense of dedication and company loyalty (Adams, 1998; Zemke et al., 2000). Based on the research discussed above, the following hypothesis will be tested in the present study:

Hypothesis 4: Older generations (Matures and Baby Boomers) will be significantly less likely than younger generations (Generation X and Echo) to intend to leave the organisation in the next 12 months.

1.7 Work Values, Generations, Work-Related Outcomes and Person-Organisation Values Fit

The general notion of person-organisation (P-O) fit has long been important in psychology and organisational behaviour (Chatman, 1991; Westerman & Cyr, 2004). A positive fit between a person and their organisation has been consistently found to promote job satisfaction and long-term organisational effectiveness (Hambleton et al., 2000; Kristof, 1996; Meglino et al., 1989). This section seeks to define P-O values fit, describe some of the measurement issues involved in assessing fit, and review the theoretical background in order to build a model of P-O values fit and work-related outcomes including job satisfaction, affective organisational commitment and intention to leave.

1.7.1 Definitions and Measurement of P-O Values Fit

In a comprehensive review of the literature, Kristof (1996) distinguished between four types of fit: person-organisation fit, person-vocation fit, person-group fit and person-job fit. Although the last three types make a substantial contribution to work outcomes, the focus of the present study is on person-organisation (P-O) fit. An important category of variables studied in P-O fit research is work values (Chatman, 1991; Finegan, 2000; Hesketh & Gardner, 1993; MOW, 1987; Taris, Feij & van Vianen, 2005). A common way to assess P-O values fit is from a 'supplies-values' (S-V) fit perspective in which fit is assumed to occur when the supplies provided by the organisation satisfy or exceed an individual's values (Edwards, 1996; Kristof, 1996; Taris & Feij, 2001). This type of fit is classed as 'supplementary' in the sense that the person and the organisation possess fundamentally similar characteristics in terms of values (Muchinsky & Monahan, 1987). The present study aims to examine P-O values fit conceptualised from a supplies-values perspective and how it may vary across generations.

P-O values fit can be measured in both a direct and indirect way (Taris et al., 2005). A direct way of measuring fit is to ask participants explicitly whether they feel the characteristics of their job fit with their own work values (e.g. Posner, Kouzes & Schmidt, 1985). However, the use of direct measures of fit has been criticised as it does not allow investigation of whether an outcome measure is related to the discrepancy between individual and organisational values, or to one or other of these components (Edwards, 1991).

Values fit can also be assessed indirectly by measuring individual and organisational values separately and combining these into one measure. One way of doing this is to use normative measures which are based on the collective judgements of individuals and organisational members whose profiles are then compared (e.g. Caldwell & O'Reilly's (1990) 'Organisational Culture Profile'). However, this technique does not allow for the contribution of individual cases (Finegan, 2000), and due to rank ordering of the values, information about the distance between component measures tends to be masked (Edwards, 1991).

The present study measured P-O values fit indirectly and at the individual level as recommended by Kristof (1996) and Finegan (2000). Individual and organisational values were assessed using common dimensions, and organisational values were then subtracted from individual values to create discrepancy or difference scores (Meyer et al., 1998). The absolute value of these scores indicated the degree of fit between the individual's values and the organisation's values or supplies. A positive difference score indicated that organisational supplies did not meet individual values, while a negative difference score indicated that values supplied by the organisation exceeded individual values (Verquer, Beehr & Wagner, 2003). An interval level scale rather than a ranking scale was also used to give information about the distance between component measures (Edwards, 1991, 1994).

1.7.2 The Process of P-O Values Fit

The development of P-O values fit is said to be a longitudinal process, starting from the employees' introduction to the organisation and continuing throughout their tenure (Taris & Feij, 2001). The 'Theory of Work Adjustment' (TWA) (Dawis & Lofquist, 1984) describes this process of P-O fit and how it can be linked to work outcomes such as job satisfaction and actual turnover (Bretz & Judge, 1994; Cable & DeRue, 2002; Taris & Feij, 2001; Westerman & Cyr, 2004). The TWA is based on the idea of correspondence in which the individual brings skills and values to the work environment, through their 'work personality', and the environment imposes conditions and provides rewards, through a 'work environment structure'. This process of correspondence is called 'work adjustment'.

The TWA suggests that successful work outcomes are the result of positive correspondence between individual and environmental characteristics. According to the theory, good correspondence (or positive 'fit') between individual and organisational values should induce job satisfaction. Alternatively, poor values fit can lead to lower job satisfaction and higher turnover or turnover intentions (Dawis & Lofquist, 1984). Another positive outcome of P-O values fit consistently reported in the research but not directly specified by the TWA is organisational commitment (see Kristof, 1996 for a review of the research). Figure 1 shows an adapted model of P-O values fit based on the TWA.

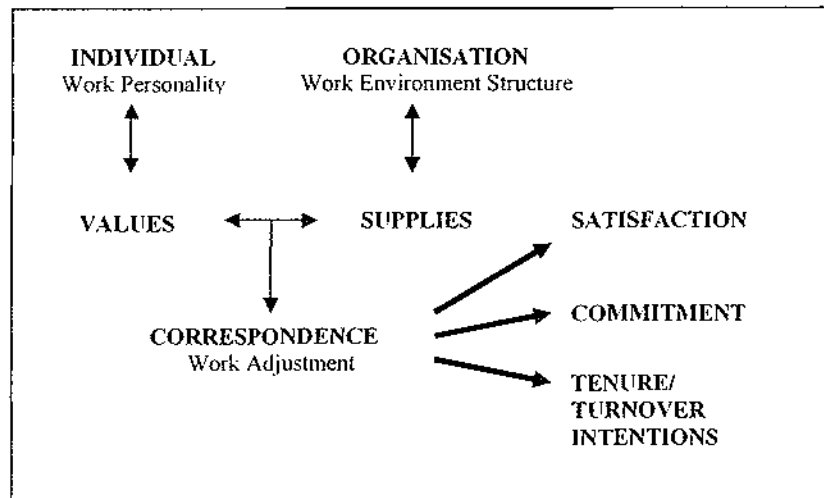


Figure 1: Process of P-O values fit adapted from the Theory of Work Adjustment (Dawis & Lofquist, 1984)

1.7.3 Generations and P-O Values Fit

The impact of age on P-O values fit has received little attention in the literature. Theoretical views suggest that the values of an organisation's influential members tend to represent the culture of the organisation (Schein, 1992). If the influential individuals are from a particular generation this may lead to the supply of generation-specific values, which may not fit with those desired by employees from other age cohorts. Miller and Yu (2003) noted that the groups currently holding the most executive and senior management positions are the Matures and Baby Boomers, introducing the potential for younger employees to experience less fit if these groups hold differing values.

Employees enter an organisation with their own values, developed through their upbringing, social experiences, and 'generational culture', which will be more or less compatible with the culture or values of the organisation. This aligns with the Theory of Work Adjustment, which suggests that the 'work environment structure' (or organisation), imposes supplies or rewards to employees depending on the values culture of the organisation. If

individual values are inconsistent with the values espoused and communicated by the organisation, this introduces the potential for conflict and different levels of fit for different generations. However, this has not received much research attention, particularly in New Zealand. These possible dynamics, identified by Miller and Yu (2003), are shown in Figure 2.

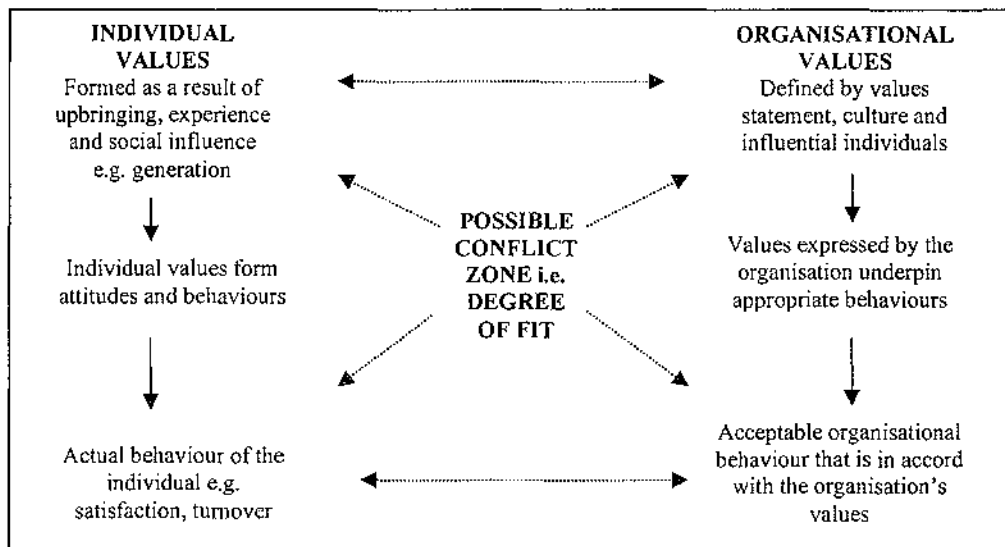


Figure 2: The interplay between individual and organisational values (Miller & Yu, 2003)

Although testing whether particular organisations' values are being influenced by individual generations is beyond the scope of the present study, differences between generations on P-O values fit will be assessed. In particular, the present study will assess whether certain types of work values produced different levels of fit for each generation.

Hypothesis 5: There will be significant differences in person-organisation values fit between generational groups (according to extrinsic values fit, intrinsic values fit, status values fit, social values fit, altruism values fit and freedom values fit).

Expanding on the notion of possible values fit differences between generational groups, and the research suggesting age differences in the common outcomes of fit (job satisfaction, organisational commitment and intention to leave), a model of P-O values fit and outcome variables was developed and tested to assess whether the model differed across age. The Theory of Work Adjustment (Dawis & Lofquist, 1984) and relevant literature on P-O values fit was used as the basis for the development of the model. The steps and rationale for associated relationships within the model are described in detail below.

1.7.4 Building the Model of P-O Values Fit

P-O Values Fit and Job Satisfaction

Job satisfaction has been reported as the most consistent outcome of P-O values fit (Dawis & Lofquist, 1984; Holland, 1997; Meglino et al., 1989; Taris & Feij, 2001; Verquer et al., 2003). In the current study, fit is hypothesised to be directly and positively related to job satisfaction, as demonstrated by Hypothesis 6 and shown in Figure 3.

Hypothesis 6: Overall person-organisation values fit will have a significant positive relationship with job satisfaction.

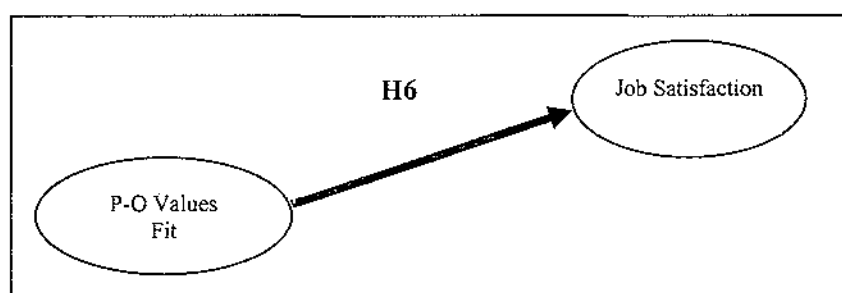


Figure 3: The hypothesised relationship between P-O values fit and job satisfaction

P-O Values Fit and Affective Organisational Commitment

As mentioned earlier, research has consistently found that organisational commitment is positively related to P-O fit (Cooper-Thomas, van Vianen & Anderson, 2004). For instance, O'Reilly and Chatman (1986) investigated the relationship between values congruence and organisational commitment and found that employees wanted to remain in the organisation, and exerted effort to maintain the relationship with an organisation with which they shared values. Affective organisational commitment is the next variable added to the model and is hypothesised to be positively related to P-O values fit (refer Hypothesis 7 and Figure 4).

Hypothesis 7: Overall person-organisation values fit will have a significant positive relationship with affective organisational commitment.

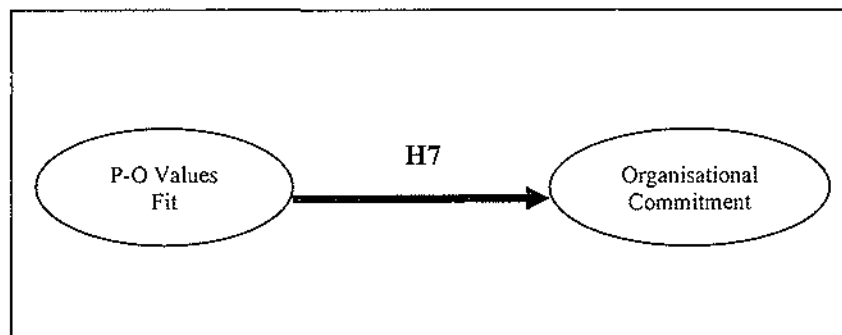


Figure 4: The hypothesised relationship between P-O values fit and affective organisational commitment

P-O Values Fit and Intention to Leave

P-O values fit has consistently been found to have a direct, negative relationship with intention to leave (Taris & Feij, 2001; Vancouver & Schmitt, 1991; Verquer et al., 2003; Westerman & Cyr, 2004). This relationship is presented in Hypothesis 8 and Figure 5.

Hypothesis 8: Overall person-organisation values fit will have a significant negative relationship with intention to leave.

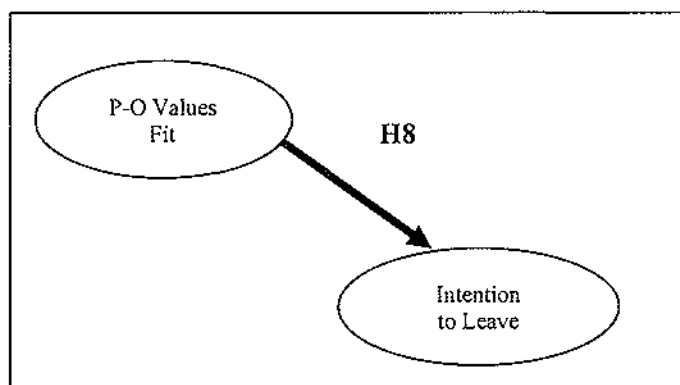


Figure 5: The hypothesised relationship between P-O values fit and intention to leave

Job Satisfaction and Affective Organisational Commitment

Job satisfaction has been found to have a significant positive relationship with organisational commitment, particularly affective commitment, and is thought to be the antecedent to these variables (Porter, Steers, Mowday & Boulian, 1974; Williams & Hazer, 1986). Past research has suggested that in Western contexts, commitment to a company develops from job satisfaction over time (e.g. Riordan & Griffeth, 1995). This is based on the idea that an individual's attitude towards their job is a more direct evaluation than the

individual's attitude towards their organisation, and an employee is less likely to develop strong affective bonds by way of commitment if they are not satisfied (Morrison, 2005).

This theory supports a proposition made by Porter et al. (1974), that commitment takes longer to develop and is more stable than satisfaction. Williams and Hazer (1986) analysed data from research conducted by Bluedorn (1982) and Michaels and Spector (1982), and found support for the satisfaction-to-commitment association using structural equation modelling. The one-way arrow shown in Figure 6 from satisfaction to commitment reflects these findings.

Hypothesis 9: Job satisfaction will have a significant positive relationship with affective organisational commitment.

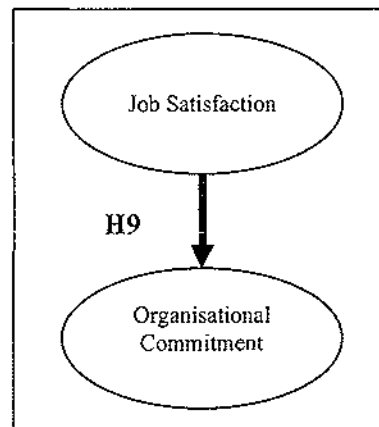


Figure 6: The hypothesised relationship between job satisfaction and affective organisational commitment.

Job Satisfaction, Affective Organisational Commitment and Intention to Leave

Both job satisfaction and organisational commitment have been shown to have a consistent negative relationship with intention to leave and actual turnover (e.g. Griffeth et al.,

2000; Kristof, 1996; Porter et al., 1974; Somers, 1995; Tett & Meyer, 1993; Verquer et al., 2003). Job satisfaction has been found to account for roughly 16% of the variance in turnover (Mobley, Hand, Baker & Meglino, 1979), while affective organisational commitment has been found to be more strongly predictive of turnover intentions (Meyer, Stanley, Herscovitch & Topolnysky, 2002). Additionally, affective commitment has been reported as being more closely linked with withdrawal behaviours such as absence and turnover, than other forms of organisational commitment (Meyer et al., 2002; Somers, 1995). Studies have also found that organisational commitment mediates the effects of satisfaction on turnover and intentions to leave (Riordan & Griffeth, 1995; Williams & Hazer, 1986). Given these findings, it is hypothesised that affective organisational commitment will mediate the relationship between satisfaction and intention to leave as outlined in Hypothesis 10 and shown in Figure 7.

Hypothesis 10: Affective organisational commitment will mediate the relationship between job satisfaction and intention to leave.

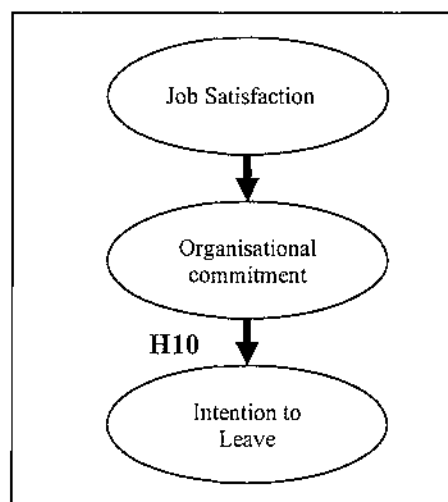


Figure 7: The hypothesised relationship between job satisfaction, affective organisational commitment, and intention to leave

P-O Values Fit, Job Satisfaction, Affective Organisational Commitment and Intention to Leave

Finally, it is hypothesised that as well as P-O values fit having a direct relationship with intention to leave, this association would also be mediated by job satisfaction and affective organisational commitment, based on past studies (e.g. Dawis & Lofquist, 1984; Westerman & Cyr, 2004). Figure 8 illustrates this relationship.

Hypothesis 11: Job satisfaction and affective organisational commitment will mediate the relationship between overall P-O values fit and intention to leave.

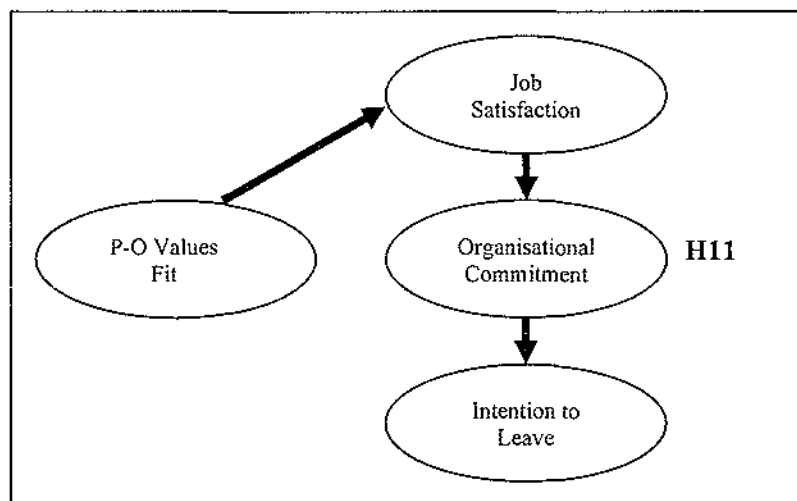


Figure 8: The hypothesised mediated relationship between overall P-O values fit, job satisfaction, affective organisational commitment and intention to leave

The overall model, shown in Figure 9, summarises the hypothesised links between P-O values fit and the outcome variables. This model, referred to as 'Model 1' will be tested in the present study.

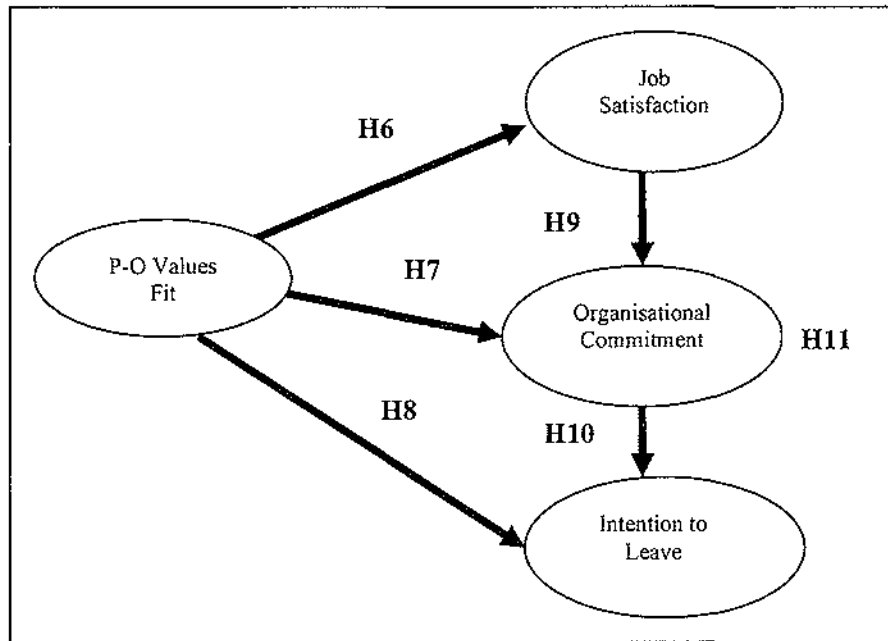


Figure 9: Model 1. The hypothesised relationships between P-O values fit, job satisfaction, affective organisational commitment and intention to leave

1.7.5 Age as a Moderator of P-O Values Fit

As outlined in this section, levels of fit between individual and organisational values can influence several work-related outcomes. Although little research has assessed the specific impact of age on P-O values fit, a number of studies have shown relationships with age and the three main outcome variables of fit (e.g. Finegold et al., 2002; Fox et al., 1994; Sparrow, 1996). In addition, theoretical approaches have suggested that fit may differ across age groups based on the values communicated by influential organisational members (e.g. Schein, 1992). Further, if generations differ according to P-O values fit across specific work values, then this may

influence the experience of overall P-O values fit (Locke, 1976). It is possible, then, that the relationship between fit and outcome variables may vary according to age.

The final part of the present study involved testing Model 1 for invariance across age groups. This allowed cross-validation the model across independent samples from within the full sample, and also tested whether there were differences between older (Mature and Boomer) and younger (Generation X and Echo) generations according to the proposed model of fit. Based on the possibility of different experiences of overall fit between generations, the final hypothesis of the present study is:

Hypothesis 12: The proposed model will be noninvariant (different) across individuals from sub-groups (as defined by generational groups) of the surveyed population.

2.0 METHOD

The present study was conducted in four parts: (1) the selection of scales through a literature review to measure work values and P-O values fit relevant to proposed generational differences, and to assess job satisfaction, affective organisational commitment and intention to leave; (2) the piloting of the questionnaire on a small sample of employed self-selected New Zealanders from a range of age categories; (3) the administration of the questionnaire to a large sample of New Zealand employees from a variety of different organisations; and finally, (4) data analysis and reporting.

A total of 1,422 employees from eight organisations based in Auckland, New Zealand were invited to participate in the present study, of whom 597 (42%) responded. Demographic characteristics of the research sample are presented in more detail in the Results section.

2.1 Selection of the Scales

The items that were selected, adapted, or created to appear in the questionnaire can be found in Appendix B. Responses to the items were self-reported. The questionnaire consisted of five sections that aimed to capture information on a large number of variables, not all of which were relevant to the present study. The measures which were applicable to the present research are outlined below.

2.1.1 Work Values

A measure of work values was required that: (1) was appropriate for contemporary organisations in New Zealand; (2) measured relevant work value dimensions identified in the

literature; and (3) allowed the comparison of individual and organisational work values. After a review of the literature, two scales (Elizur, 1984; Lyons, 2004) were found to assess most of the relevant characteristics of work values.

Elizur's (1984) Work Values Questionnaire (WVQ)

The 24-item 'Work Values Questionnaire' developed by Elizur (1984) has been thoroughly tested in a number of studies (e.g. Elizur, 1984; Elizur, 1994; Selmer, 2000) as well as in cross-cultural comparisons (Borg, 1986; Elizur et al., 1991) and has been shown to be internally consistent (e.g. $\alpha = .88$, Selmer & de Leon, 2002). The structure of the questionnaire has been replicated across a number of studies (e.g. Elizur et al., 1991; Ros et al., 1999; Selmer, 2000), and has been shown to be similar for both men and women (Elizur, 1994).

Elizur (1984) based the development of the scale on a facet definition of work values which provided guidelines for selecting items and allowed for the formulation of hypothesised relationships between work value components. Using the statistical technique of Smallest Space Analysis (SSA), Elizur described scale items as: (1) 'Instrumental' (pay, hours of work, security, benefits, and work conditions); (2) 'Affective' (relations with supervisor, co-workers, recognition, feeling esteemed as a person and opportunity to interact with people); and (3) 'Cognitive' values. As suggested by Ros et al. (1999), this final category was divided into a two-way classification of: 'Cognitive-Intrinsic' items (responsibility, interesting work, feedback, meaningful work, use of abilities, opportunity for development and making a contribution to society); and (4) 'Cognitive-Prestige' items (advancement, achievement, influence in work and the organisation, independence, having pride in company, status). The 24-

items from the WVQ were included in the present research (see Appendix B, Section B, items 1 to 24).

Lyons (2004) Work Values Scale (WVS)

The 31-item WVS was developed from 12 well validated work value measures and has been administered to 1,196 Canadian workers in previous research by Lyons (2004). The scale was developed by reviewing existing work values measures (see Appendix C for a list of these scales) to generate a comprehensive list of items and then checking these items for conceptual overlap. A qualitative identification of possible new items was also performed using a group of undergraduate business students who were asked to list ten things that they considered important in their 'ideal job'. The resulting scales factors were: (1) 'extrinsic' (e.g. salary); (2) 'intrinsic' (e.g. interesting work); (3) 'status' (e.g. achievement); (4) 'social' (e.g. co-workers); (5) 'altruism' (e.g. contributing to society); and (6) 'freedom' (e.g. work/life balance). The WVS has been shown to be reliable with internal consistency alpha coefficients for the factors ranging from 0.64 for freedom-related work values to 0.81 for social and extrinsic values (Lyons, 2004).

As Elizur's (1984) scale was one of the scales used as the basis for Lyons's (2004) WVS, this made it feasible to merge the scales without a vast number of additional items (see Appendix B. Items 1-3, 5-7, 9-14, 16, 17, 19, 20, 22-24 overlapped with Elizur's scale, with the extra items from Lyons (2004) being 25-32, 34, 35, 38 and 40). Elizur's (1984) instrumental, affective, cognitive-intrinsic and cognitive-prestige factors overlapped with Lyons (2004) extrinsic, altruistic, intrinsic and status factors respectively. Lyons's (2004) freedom and social-related factors were included in the present research to make the scale more relevant for present studies of generational differences in work values.

Additional Work Value Items

Further items were included in order to examine specific work values that have been suggested to differ between generations. One item was included based on the work of Cherrington et al. (1979) who found generational differences in 'pride in craftsmanship'. A recent study by Smola and Sutton (2002) also identified 'pride in craftsmanship' as an important work value in examining generational differences, so this item was included in the present study (see Appendix B, item 36).

Thomas (2002) developed a scale measuring Generation X work values. A comparison of this scale with the work values measure used for the present research indicated that the values in Thomas's scale were all included except for 'technology', so an appropriate item was constructed for the present study that tapped into this value (see Appendix B, item 37).

Two final items were included on the basis of evidence which suggested that working as part of a team and communicating optimism were valued differently by different generations (Karp et al., 2001; Tulgan, 1995; Zemke et al., 2000) (see Appendix B, items 33 and 39).

Generational Work Values Scale (2005)

The final work values scale consisted of 40-items. The factor structure found by Lyons (2004) was used as a basis for this study. Additional items were sorted *a priori* based on past literature. The items as well as their hypothesised factor breakdowns can be seen in Appendix D. Confirmatory factor analysis was used to verify this factor structure and is reported in the Results.

Due to the number of items in this scale, and the desire to obtain information about the distance between component measures, rating scales rather than a ranking system were used. However, ratings of values can be susceptible to social desirability bias, in that participants may rate all of their values as being highly important (Meglino & Ravlin, 1998). To address this concern, wording for the present scale was modelled on Kluckhohn (1951) who argued that values can be classified according to their level of priority for the individual. Lyons (2004) reasoned that by asking a respondent to rate the degree to which a work value is considered important in their work, it should be possible to differentiate high priority values from low priority values. Based on Lyon's (2004) work, respondents were asked "To what extent is each item a top priority for you in your work?". Responses ranged from '1 = Not at All' to '5 = To the Highest Possible Extent' for each of the 40 work value items.

2.1.2 Person-Organisation Values Fit

Assessment of P-O values fit involved asking each respondent to answer parallel questions concerning each of the 40 work values. Respondents were asked to rate: (1) "To what extent is each item a top priority for you in your work?" (which assessed the work values of individual respondents); and (2) "To what extent does you feel your organisation provides you with each item?" (which assessed the extent to which an individual felt that value was held or supplied by their organisation) (see Appendix B, Section B, second column, items 1 to 40). Responses were on the same 5-point scale where '1 = Not at All' and '5 = To the Highest Possible Extent' to allow the statistical properties of the scales to be directly compared (Kristof, 1996). This enabled comparisons to be made between the extent to which an individual rated a

work value and the extent to which they felt that their organisation provided them with that value (Meyer et al., 1998).

Discrepancy scores were calculated to provide a measure of P-O values fit, where perceived organisational values were subtracted from individual values. These scores were used as they provided the clearest indication of the differences between the individual's work values and those they perceive their organisation to hold. This method of identifying the degree of alignment between individual and organisational work values has been successfully used in the past (e.g. Bretz & Judge, 1994; Cowan, 2005; Finegan, 2000; Meyer et al., 1998; Taris & Feij, 2001; Verquer et al., 2003).

2.1.3 Work-Related Outcomes

Job Satisfaction

The 'Job Satisfaction Scale' (JSS) (Warr et al., 1979) consists of 15 items that describe aspects of job satisfaction, with a 16th overall item. The scale asks participants to indicate "How satisfied or dissatisfied do you feel with each of the following aspects of your work?". The measure can be used as a composite measure, and has also been divided into two subscales pertaining to satisfaction with extrinsic (eight items e.g. pay) and intrinsic (seven items e.g. responsibility) aspects of a job. The scale has been shown to be internally consistent, with coefficient alphas for the composite measure ranging from .80 to .91 (Abraham & Hansson, 1996; Norman, Collins, Conner, Martin & Rance, 1995), alphas ranging from .84 to .88 for intrinsic satisfaction, and an alpha of .76 for extrinsic factors (Cordery, Sevastos, Mueller, &

Parker, 1993; Wright & Cordery, 1999). Warr et al. (1979) also found this scale to be reliable, citing a test-re-test correlation co-efficient of .63.

The JSS has been used to successfully distinguish between satisfied and dissatisfied employees (Winefield, Winefield, Tiggemann & Goldney, 1991). Scale scores have also been shown to positively correlate with job-related wellbeing, perceived job competence and perceived job control (Wright & Cordery, 1999). The scale has also been successfully administered to blue collar workers which make up a portion of the sample in the present study (Warr et al., 1979). Responses were on a 5-point scale ranging from '1 = Very Dissatisfied' to '5 = Very Satisfied' (See Appendix B, Section A, items 1 to 16).

Affective Organisational Commitment

The nine-item version of the 'Organisational Commitment Questionnaire' (OCQ) measuring affective commitment to the organisation was included in the present study (Mowday, Steers & Porter, 1979). Statements assessed acceptance of organisational values (e.g. "I find my values and the organisation's values are very similar"), desire to remain within the organisation (e.g. "I would accept almost any type of job assignment in order to keep working for this organisation"), and willingness to exert effort (e.g. "I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful"). The scale has shown coefficient alpha values ranging from .74 to .92 (e.g. Aryee, Luk & Stone, 1998; Netemeyer, Burton & Johnston, 1995; Somers & Casal, 1994; Wayne, Shore & Linden, 1997) and Vandenberg and Lance (1992) found the test-re-test reliability coefficient to be .74.

Furthermore, Cohen (1996) performed confirmatory factor analysis on this scale and found it to be empirically distinct from job involvement, career commitment, work involvement and the Protestant Work Ethic. The scale has also been found to be distinct from job satisfaction (Mathieu & Farr, 1991), and correlated negatively with intended turnover (Wahn, 1998).

Respondents were asked to rate their agreement with nine statements pertaining to feelings about their current organisation (see Appendix B, Section C, items 1 to 9). Responses were on a 5-point scale ranging from '1 = Strongly Disagree' to '5 = Strongly Agree'.

Intention to Leave

Intention to leave was assessed using three items (O'Driscoll & Beehr, 1994). The three items were: (1) "Thoughts about quitting this job cross my mind" with responses ranging from '1 = Never' to '6 = All the Time'; (2) "I plan to look for a new job in the next 12 months", with responses ranging from '1 = Strongly Disagree' to '6 = Strongly Agree'; and (3) "How likely is it that, over the next year, you will actively look for a new job outside of this organisation?" with responses ranging from '1 = Very Unlikely' to '6 = Very Likely' (see Appendix B, Section E, items 1 to 3).

The internal consistency of the measure has been demonstrated by an alpha coefficient of .93 obtained from samples in New Zealand and the USA (O'Driscoll & Beehr, 1994). A recent New Zealand study showed the existence of one factor using exploratory factor analysis, and showed very high reliability of this factor ($\alpha = .90$, Cowan, 2005).

2.1.4 Demographics

Items asked for participants' gender, age (representing generational groups), educational level, tenure in organisation, tenure in current role, job level and type of employment relationship (e.g. full time), see Appendix B, Section D, items 1 to 7.

2.2 Procedure

2.2.1 Development of Web-Based and Pencil and Paper Versions of the Questionnaire

The questionnaire was developed in two versions, one web-based and one pencil and paper-based. The web-based questionnaire was developed in accordance with the guidelines for creating computerised tests and questionnaires provided by Green, Bock, Humphreys and Rackase (1984), and Kyllonen (1991). A consistent colour scheme was used to help respondents distinguish between instructions and questions, and each window presented a new section of the questionnaire. Participants were able to easily negotiate back and forth within the questionnaire, and the final window thanked individuals for their cooperation (see Appendix E for an example of the web-based format).

The pencil and paper and web-based questionnaires had identical content. However, formatting restrictions in the design of the web-based questionnaire meant that the work values questions for the individual and the organisation could not be presented side by side as in the pencil and paper version. As a result, in the web-based questionnaire the individual value items were presented first with the organisational value items on the next page.

Following approval from Massey University's Human Ethics Committee (ALB Application MUAHEC 05/012), a pilot study was conducted of both the web- and pencil and

paper-based versions. A total of 40 employed workers (friends and acquaintances) pilot tested the web-based version and were sent an email which included a link to the secure data collection site (www.surveymonkey.com). A further five individuals were asked to complete the pencil and paper version of the questionnaire. Both groups of respondents were asked to give feedback regarding the length of time it took to complete and any difficulties or ambiguity they encountered with the format. Feedback resulted in a minor change to an item in the organisational commitment scale in which the language was considered too informal (Appendix B, Section A: item 2 was originally “I talk up this organisation to my friends as a great organisation to work for”, and was changed to “I describe this organisation to my friends as a great organisation to work for”). This rewording was suggested by Morrison (2005). According to the respondents’ feedback, the prototype questionnaire took 20 minutes to complete, which was deemed appropriate by the researchers.

2.2.2 Data Collection

A number of Auckland organisations were approached and asked to participate in the present study. Consent forms were distributed to the managers of the interested organisations (Appendix F). After consent was granted from each organisation, interviews with managers were conducted to clarify the aims of the study and to investigate whether web-based, pencil and paper based, or a combination of modes was preferred for questionnaire administration.

Web-Based Questionnaire

In order to keep the organisations separate for summary reports, separate databases were set up in which the secure link for each participating organisation was unique. Each database was identified with a numerical code, to which only the researchers had access. The web survey supplier, 'Survey Monkey', guarantees anonymity provided that no identifying information is sought in the questionnaire. The database does not store details or track participants' email addresses. Survey Monkey is currently a member of the United States Department of Commerce Safe Harbour framework indicating their commitment to comply with United States and European data collection rules. Further details about the accessibility and benefits of using web based questionnaires in psychological research are in Appendix G.

The manager from each organisation was sent an email (see Appendix H) to distribute throughout their organisation using the 'explode' email option to ensure anonymity. The email contained the link to the company-specific secure data collection site. It also offered respondents the option of completing a pencil and paper version of the questionnaire (held securely by the relevant manager), and to return these to the researcher directly via a freepost envelope. To encourage participation the email also stated that all respondents were able to access confectionary provided by the researcher. Participants were also able to request copies of the summary report of their anonymous organisation-specific findings from the study after data had been collected and analysed. Posters detailing these options were posted around the organisations (see Appendix I).

Once participants clicked on the secure link they were taken directly to the participant information sheet outlining the study and were assured that the study was anonymous and that their identities could not be tracked (see Appendix J). Participants were able to navigate

throughout the questionnaire via user-friendly commands before finally submitting their survey. In the information sheet and email a deadline of two weeks for participation was given from the date the email was sent, followed up with a reminder email after one week.

Pencil and Paper-Based Questionnaire

For those participants who did not have internet access, envelopes containing the participant information sheet (see Appendix K), a copy of the questionnaire, some confectionary to encourage participation, and a freepost return envelope were distributed via internal mail. The pencil and paper questionnaires were identified by the same organisation-specific codes as the web databases. Participants were asked not to write their name anywhere on the questionnaire and to return it within two weeks of receiving it. A mail reminder was sent after one week. One company asked that administration sessions be conducted due to an antiquated internal mail system. The researcher ran three 2 hour sessions where participants were able to come to a central meeting room and complete the questionnaire. Information about these sessions was communicated through line managers.

2.3 Data Analysis

Data were exported from the web databases into SPSS 13.0, and the returned pencil and paper questionnaires were entered into the appropriate databases. Data were checked and double checked by pairs of researchers in order to detect and remove data entry or exporting errors. After a descriptive summary was provided for each participating organisation in a report, the data files were combined for further analysis.

2.3.1 Data Screening

Due to the difficulty in estimating missing values when cases have significant amounts of missing data, 93 respondents with 15-30% missing data were omitted from further analyses (Schafer, 1997). This left 504 cases for analysis. Inspection of the data set and the demographic variables for each of the deleted cases and comparing these with the remaining data suggested that these cases occurred at random and their deletion would not bias results.

The SPSS Missing Value Analysis (MVA) command was run to identify patterns within the remaining missing values. One item on the work values scales ('teamwork') had more than 9% missing data after deletion of the 93 cases and was not included in future analyses as recommended by Tabachnick and Fidell (2001). All remaining cases had less than 5% missing data and these scores were missing randomly. Because of these factors, the EM (expectation maximization) method of imputation was considered appropriate according to Tabachnick and Fidell (2001). This method works by creating a missing data correlation (or covariance) matrix by assuming the shape of a normal distribution curve for the missing data and basing inferences about this data on the likelihood under that distribution (Tabachnick & Fidell, 2001). The EM technique has been praised for its realistic estimates of variance (Little & Rubin, 1987).

The study variables were checked for outliers and normality. No univariate outliers (cases with z-scores in excess of 3.29, $p < .001$, Tabachnick & Fidell, 2001) were found and the normality and kurtosis statistics were within the acceptable bounds of +3.00 to -3.00 as suggested by Thode (2002).

2.3.2 Representativeness of the Study Sample

In order to assess the representativeness of the study sample, demographic information from the present study was compared to the New Zealand Labour force as a whole (as reported in 2005), as well as with data available from the 2001 census on the Statistics New Zealand website (2005), using Person Chi-Square statistics.

2.3.3 Preliminary Analyses

Confirmatory Factor Analyses

Confirmatory factor analyses using Structural Equation Modelling in AMOS 4.0 (Arbuckle, 1999) was used to create measurement models of the scales. This programme provides an estimated covariance matrix which is compared with the observed sample covariance matrix to assess whether the hypothesised model fits the data (Byrne, 2001) (see Appendix L for background of SEM). This method was deemed appropriate as the ratio of sample size to observed and estimated parameters was adequate, given that the overall reliabilities of the scales were high (ranging from .744 to .949) (Tabachnick & Fidell, 2001), none of the variables were significantly skewed or highly kurtotic and no outliers were found, and all observed variables appeared to be linearly related (Grimm & Yarnold, 2000).

Assessment of measurement model fit was based on a number of criteria reflecting statistical, theoretical and practical considerations to assess the degree of similarity between the model and the data (Byrne, 2001; Hoyle, 1995). Although there has been little agreement about the value of various fit indices, Pedhazur (1982) suggests that no single fit index should be relied upon and that model formulation should also be based on theoretical considerations. Both

absolute and incremental goodness-of-fit indexes were used for the present study. Absolute fit was assessed using the chi squared likelihood ratio statistic (χ^2), and incremental goodness-of-fit measures included: (1) the Comparative Fit index (CFI: Bentler, 1989, 1990); (2) the Tucker Lewis Index (TLI: Tucker & Lewis, 1973); and (3) the Root Mean Square Error of Approximation (RMSEA: Browne & Cudeck, 1989). The indices were used for measurement model assessment and subsequent testing of structural model fit. Descriptions of these indices are provided below.

Fit Indices

- *Chi-Square* (χ^2) values are provided although this statistic is sensitive to sample size (Ullman, 2001). A significant chi-square indicates lack of satisfactory model fit.
- *Comparative Fit Index* (CFI: Bentler, 1989, 1990). The CFI ranges from zero to 1.00 and provides a measure of complete covariations in the data where a value $>.90$ indicates a good fit to the data (Byrne, 2001; Tabachnick & Fidell, 2000).
- *Tucker Lewis Index* (TLI: Tucker & Lewis, 1973). This index compares the lack of fit of a target model to the lack of fit of a baseline model (the independence model) and estimates the improvement per degree of freedom of the target model over the baseline model (Hoyle, 1995). The TLI yields values ranging from zero to 1.00 with values close to .95 (for large samples) suggesting good fit (Byrne, 2001; Hu & Bentler, 1999). The statistic was computed in the present study using Maximum Least Squares estimation as recommended by Hoyle (1995) and Hu and Bentler (1995).

- *Root Mean Square Error of Approximation* (RMSEA: Browne & Cudeck, 1989). The RMSEA is sensitive to the complexity of the model and takes into account the error of approximation. More importantly, it can indicate how well the model may fit the population covariance matrix if available (Byrne, 2001). Fit values for the RMSEA suggest adequate fit where values fall between .08 and .10 (Browne & Cudeck, 1993), with others suggesting acceptable fit where RMSEA values are below .08 (Byrne, 2001; MacCallum, Browne & Sugawara, 1996). Values less than or equal to .06 indicate excellent model fit (Hu & Bentler, 1999).

Measurement Model Refinement

The procedure of refining the measurement models was as follows: (1) fit statistics were generated for each hypothesised model; (2) the standard regression weightings for each item were inspected and if items had moderate to low standard regression weights ($<.5$), these were removed; and (3) the models were respecified without the items, resulting in a better fit to the data and more parsimonious measurement models.

The factor structure of the 'Generational Values Scale-Individual'; 'Generational Values Scale-Organisational'; 'Job Satisfaction Scale' and 'Organisational Commitment Questionnaire' were investigated to ensure that mean composite scores could justifiably be calculated. Confirmatory factor analysis was inappropriate for the 'Intention to Leave Scale', which only had three items, so this scale was subjected to principle components factor analysis with varimax rotation in SPSS. Analyses were then performed on each scale to assess internal reliability.

Discrepancy Scores

Discrepancy scores on each of the six work value scales were calculated by subtracting the organisation value scores from the individual value scores on corresponding values. The absolute value of these scores indicated the degree of fit between the individual's values and the organisation's values, with zero representing absolute fit. A positive sign for the difference score indicated that individual values exceeded those offered by the organisation and so individual values were not being met. A negative sign indicated that organisational value supplies surpassed individual value needs and so individual values were being exceeded. A measurement model of the overall P-O values fit scale was also tested.

2.3.4 Bivariate Analyses

In order to test the predicted relationships between study variables, Pearson product-moment correlation coefficients were computed. As there was a large number of correlations (a 22 x 22 correlation matrix), an alpha level of .01 was set in order to minimise the probability of Type 1 error. In order to consistently describe relationships, the guidelines for conventional practice were used as described by Cohen and Cohen (1983), where effect sizes for correlations are referred to as follows: $r = .10$ (weak), $r = .30$ (moderate), and $r > .50$ (strong).

2.3.5 Multivariate Analyses

Various techniques were used to investigate the relationships among study variables. Multivariate Analysis of Variance (MANOVA) was used to examine generational differences according to work values, job satisfaction, affective organisational commitment and intention to

leave, and P-O values fit (using values discrepancy scores). The use of this method was deemed appropriate as: (1) there was more than one dependent variable in each analysis; (2) the method assumes that the dependent variables are correlated to some extent; and (3) it keeps the Type I error rate at the nominal alpha level (Tabachnick & Fidell, 2001). Before performing these tests, data were first checked for homogeneity of variance and normality.

If the MANOVA yielded significance, then it was considered acceptable to continue with univariate ANOVAs without excessive inflation of the alpha and risk of Type I error (Bray & Maxwell, 1982; Grimm & Yarnold, 2000). Where appropriate, Tukey's (Honestly Significant Difference) post-hoc tests were also used to detect where differences were occurring. For consistency Clark-Carter's (1997) classification of effect size was employed where partial η^2 $<.01$ was considered small, $.01$ to $.10$ was considered medium, and $.10 >$ was considered to be a large effect size.

2.3.6 Structural Equation Modelling

Once each measurement model in the present study was assessed, the latent variables (overall P-O values fit, job satisfaction, affective organisational commitment and intention to leave), their associated observed endogenous items and the hypothesised relationships between them were modelled and tested. Data were deemed appropriate for SEM as they were continuous and normally distributed with no outliers, and there was an acceptable number of subjects per estimated parameter (Bentler, 1995; Tabachnick & Fidell, 2001). To correct for the unreliability of the intention to leave indicator the error term was fixed at a specific value (Bollen, 1989). The fixed value was determined by multiplying the proportion of error variance ($1 - \rho$) of the indicator by the variance of the indicator, where $\rho = .245$.

The model was tested for statistical significance by assessing the regression weights according to critical ratio statistics and the fit indices outlined on pages 67 and 68. Where critical ratios were outside the range of ± 1.96 and $p < .05$, the non-significant paths were removed and the model was respecified to achieve a more parsimonious and better fitting model.

2.3.7 Model Testing for Invariance across Age

Once the structural model for overall P-O values fit and work-related outcomes was confirmed, the model was tested for invariance across age. The procedure for testing for invariance involved first testing the baseline model for the overall sample with no equality constants imposed (Byrne, 2001). This was then compared with constrained models in which parameters (factor loadings, betas and means) were constrained to be equal between groups. The change in chi-square value ($\Delta \chi^2$) provided the basis for comparison with the initial model. If the change in the chi-square was significant, then the fit of the two data sets to the model could be judged to be significantly different (Byrne, 2001). If the change was not significant, then the model structure was said to be invariant (no different) across groups. As the age data was categorical in nature, respondents were divided into two groups for the invariance testing, the older group comprising Matures and Boomers ($n = 132$), and the younger group comprising Generation X and Echo ($n = 372$).

3.0 RESULTS

This section is presented as follows: first, demographic sample characteristics are provided followed by an assessment of the representativeness of the present research sample when compared to the New Zealand labour force population as a whole. Second, an investigation of the factor structure and psychometric properties of each scale is described. Third, the general bivariate analyses of all study variables are reported. Fourth, testing of hypotheses and SEM models are presented.

3.1 Sample Characteristics

A total of 504 respondents (34%) returned usable questionnaires. Eight different organisations, from the private sector, participated. Thirty percent (149) of the participants were from legal companies, 27% (134) were from media corporations, 18% (94) were from the construction industry, 12% (62) were from pharmaceutical distribution, and 4% (21) were from information technology firms. Nine percent (44) were classed as an 'other' group, and consisted of people predominantly from the recruitment industry. Demographic characteristics of the research sample are presented in Table 2.

Just over half (57%) of the sample were female. The majority of respondents (57%) were born between the years of 1962-1979 (Generation X, aged between 26 and 43 years at the time of this study), followed by Baby Boomers (23%) (aged 44-59 years), Echos (17%) (aged between 5 and 25 years), and a small number of Matures (3%) (aged 60 and above). The majority of the Echo group were female (76%) while 79% of the Matures were male. There were similar proportions of males and females in the remaining generational groups. Over half

of the respondents (66%) indicated that they had completed some kind of tertiary training. Three respondents did not indicate their highest level of education.

Forty-eight percent of overall respondents reported their job level to be salaried staff without direct reports. Thirty-five percent of the older generations (Matures and Boomers) and 27% of the younger groups (Generation X and Echo) reported being in managerial or supervisory positions. The mean tenure was 4.16 years, ranging from 1 month to 28 years. The average time that employees had been in their current role was 2.65 years, ranging from one month to 20 years. The majority of the group (89%) reported working full time.

Table 2: Sample demographic characteristics

DEMOGRAPHIC VARIABLES					
	Number	Percent		Number	Percent
Gender (n = 502)			Tenure with Organisation (n = 503)		
Male	215	42.8	0 – 1 year	161	32.0
Female	287	57.2	2 – 5 years	218	43.3
			6 – 10 years	72	14.3
Year Born (n = 504)			11 – 15 years	23	4.6
≤ 1945 (Matures)	14	2.8	15 years +	29	5.8
1946 – 1961 (Baby Boomers)	118	23.4			
1962 – 1979 (Generation X)	289	57.3	Tenure in Current Role (n = 503)		
1980 ≥ (Echo)	83	16.5	0 – 1 year	235	46.7
			2 – 5 years	202	40.3
Highest Level of Education (n = 501)			6 – 10 years	39	7.6
Less than School Certificate	41	8.2	11 – 15 years	13	2.6
School Certificate	43	8.6	15 years +	14	2.8
Sixth form Certificate	32	6.4			
University Entrance or Bursary	32	6.4	Level of Current Role (n = 504)		
Trade Certificate	18	3.6	Senior Manager	33	6.6
Technical Tertiary	104	20.8	Middle Manager	68	13.5
University Undergraduate Degree	154	30.8	Supervisor/Team Leader	46	9.1
University Postgraduate Degree	77	15.2	Salaried Staff without Direct reports	244	48.4
			Waged worker	107	21.2
Employment Relationship (n = 503)			Qualified tradesperson	6	1.2
Full Time	448	89.0			
Part Time	30	6.0			
Contract	13	2.6			
Temporary	8	1.6			
Full Time Temporary	2	.4			
Full Time Contract	2	.4			

3.1.2 Representativeness of the Study Sample

Using the March 2005 and 2001 data of the composition of the New Zealand labour force (Table 3), Pearson's chi-square test showed that the present sample was representative in terms of gender ($\chi^2_1 = 2.47, p > .05$), but not in terms of generational groups ($\chi^2_3 = 15.62, p < .05$). Compared to estimated age bands in the 2001 census, Matures and Baby Boomers were underrepresented in the present sample and the Generation X and Echo groups were overrepresented. This dynamic is expected given the four year difference between data collections.

Table 3: Comparison of gender and age characteristics between the current sample and data from Statistics New Zealand (2001, 2005)

DEMOGRAPHIC VARIABLES		
	Percent	
	Current Data	2005 Data ¹
Gender		
Male	42.8	54
Female	57.2	46
Year Born	Current Data	2001 Census Data ²
≤ 1945 (Matures)	2.8	15
1946 – 1961 (Baby Boomers)	23.4	36
1962 – 1979 (Generation X)	57.3	43
1980 ≥ (Echo)	16.5	6

¹ This data is based on March 2005 data reported by Statistics New Zealand

² This data (according to estimated age bands) is based on the 2001 census

Note: Two different years of baseline data were used as there was no current age information available for the 2005 data.

The Mature generation group consisted of only 14 cases which, if included, would have reduced the power of the statistical analyses (Coolican, 1999). An independent samples t-test showed that there were no significant differences between the Mature and Baby Boomer groups on: individual or organisational work values, job satisfaction, organisational commitment and intention to leave, or P-O values fit at the $p < .05$ significance level. This allowed these groups to be combined into a Mature/Boomer group for the remainder of the analyses.

3.2 Preliminary Analyses

3.2.1 *Generational Work Values Scale-Individual*

In order to confirm the factor structure of the work values scale in the present sample, confirmatory factor analysis was conducted using AMOS. The assumptions of SEM were met as there was a large sample size ($n = 504$) and the variables were continuous and normally distributed (Byrne, 2001; Hoyle, 1995).

The 39-item work values measurement model was analysed with 6 factors specified (Lyons, 2004): extrinsic, intrinsic, status, social, altruism and freedom (see Appendix D for factors and their associated items, but with teamwork excluded). The measurement model showed reasonable approximation to the data ($\chi^2 = 2906.73$, $p < .001$; $df = 687$; TLI = .963; CFI = .967; RMSEA = .080). In examining the standardised regression weights for each scale, several items exhibited moderate to low factor loadings with their latent variables and were removed from the model. These were: travel .471, work alone .381, company .459, and meet people .498.

This resulted in a 35-item work values model with similar fit statistics ($\chi^2 = 2329.76$, $p < .001$; $df = 545$; TLI = .966; CFI = .971; RMSEA = .081) as the 39-item model. However, as suggested by Anderson and Gerbing (1988) parsimony was employed and the 35-item model was used for the present study.

3.2.2 Generational Work Values Scale-Organisational

The 6-factor, 35-item measurement model was analysed for the organisational work values items. This measurement model also showed adequate fit ($\chi^2 = 2589.85$, $p < .001$; $df = 545$; TLI = .957; CFI = .963; RMSEA = .086). Inspection of the standardised regression weights for each scale showed no items with loadings of $<.5$.

Mean scale scores were then calculated for individual and organisational values. Reliabilities for each of these scales can be seen in Table 4.

3.2.3 Person-Organisation Values Fit

Discrepancy Scores

In order to test the hypotheses concerning person-organisation values fit, discrepancy scores for each of the six value scales were calculated by subtracting the organisation scores from the individual scores. Descriptive information concerning these scores can be seen in Table 4.

Overall P-O Values Fit

An overall person-organisation values fit measurement model was developed for later structural model testing. The fit statistics for this overall model were: $\chi^2 = 60.37$, $p < .001$; $df = 9$; TLI = .962; CFI = .984; RMSEA = .107.

With an RMSEA of .107, this measurement model should be considered with some caution. However, as the other fit statistics were good for this scale, there were no standardised regression weights less than .5, and the scale had good internal reliability ($\alpha = .90$), it was deemed acceptable for use in the present study (Hoyle, 1995).

3.2.4 Work-Related Outcomes

Job Satisfaction

As debate exists in the literature as to whether the job satisfaction scale shows 1 or 2 factors, a 1-factor and 2-factor model were both fitted to the data and the statistics compared. Confirmatory factor analysis produced the following fit statistics for the 2-factor (extrinsic and intrinsic) model of job satisfaction: $\chi^2 = 490.70$, $p < .001$; $df = 89$; TLI = .977; CFI = .983; RMSEA = .095. After inspection of the standardised regression weights, items with loadings less than .5 were removed from the model (work conditions .415, workers .474, variety .494, hours of work .389, and pay .489).

The 1-factor solution, with the above items removed, showed better fit to the data: $\chi^2 = 162.32$, $p < .001$; $df = 38$; TLI = .988; CFI = .992; RMSEA = .081. The 10-item single factor scale was used in subsequent analyses. The items were averaged in SPSS to produce a mean job satisfaction score.

Overall, 33% of the present respondents were either 'satisfied' or 'very satisfied' with their work, while 13% reported dissatisfaction. Approximately half of the sample was neither satisfied nor dissatisfied (54%).

Affective Organisational Commitment

This 9-item scale was confirmed to be measuring a single factor (affective organisational commitment), which is consistent with the literature (e.g. Mowday et al., 1979). The measurement model produced satisfactory levels of fit ($\chi^2 = 118.39$, $p < .001$; $df = 27$; TLI = .956; CFI = .967; RMSEA = .082) and all standardised regression weights for items were $>.5$. The items were then averaged to produce a mean scale score.

A small portion of the present sample (17%) showed low levels of commitment to their organisations, while 34% showed high commitment. The remainder of the sample reported being neither highly committed or uncommitted.

Intention to Leave

The analysis of the intention to leave scale using CFA was problematic as the single latent variable only had three indicators. Accordingly, exploratory factor analysis was applied, as previously performed by Brough and Frame (2004). Prior to conducting principle components analysis, suitability of the data for factor analysis was assessed. With a value of .70, the Kaiser-Meyer-Olkin measure of sampling adequacy (Kaiser, 1970) was higher than the recommended value of .60, and Bartlett's (1954) test of sphericity was statistically significant, thus supporting the factorability of the correlation matrix (Tabachnick & Fidell, 2001). As

expected, the eigenvalues and scree plot indicated the existence of only one factor supporting the theoretical structure of the measure. The single resulting factor accounted for 83.3% of the total variance and items were averaged to produce a mean score for intention to leave.

Forty-nine percent of respondents indicated that they were not interested in leaving their current organisation within the next 12 months, with 37% saying they thought about doing this some of the time. Only 14% of respondents reported that they were prepared to leave in the next year.

Table 4: Descriptive statistics for the study variables

Scale	No. of Items	Min	Max	Mean	SD	α
Work Values - Individual						
Extrinsic	6	1.33	5.00	3.81	.65	.78
Intrinsic	12	1.08	5.00	3.97	.59	.91
Status	8	1.13	5.00	3.65	.66	.86
Social	3	2.00	5.00	4.18	.64	.69
Altruism	3	1.33	5.00	3.74	.70	.63
Freedom	3	1.00	5.00	3.91	.71	.65
Work Values - Organisational						
Extrinsic	6	1.33	5.00	3.20	.69	.78
Intrinsic	12	1.00	5.00	3.30	.76	.94
Status	8	1.00	5.00	3.09	.79	.90
Social	3	1.00	5.00	3.61	.78	.74
Altruism	3	1.00	5.00	3.17	.77	.71
Freedom	3	1.00	5.00	3.39	.83	.74
Discrepancy Scale Scores						
Extrinsic Fit	6	-1.50	3.67	.61	.82	-
Intrinsic Fit	12	-.83	3.33	.69	.74	-
Status Fit	8	-1.38	3.13	.56	.81	-
Social Fit	3	-1.33	4.00	.58	.87	-
Altruism Fit	3	-2.67	4.00	.57	.87	-
Freedom Fit	3	-2.00	3.67	.52	.89	-
Job Satisfaction	10	1.50	5.00	3.64	.63	.87
Affective Organisational Commitment	9	1.00	5.00	3.63	.74	.91
Intention to Leave	3	1.00	6.00	2.88	1.49	.89

Note: The alpha reliabilities are not provided for the discrepancy scale scores as they are difference scores.

Table 4 presents the number of items, minimum and maximum scores, means, standard deviations, and Cronbach's α for each of the scales used for hypothesis testing in the present

study. Tabachnick and Fidell (2001) recommend that $\alpha = .65$ and above shows good reliability for scale items. All of the scales show good internal reliability except the individual altruism and freedom work value scales with $\alpha = .63$ and $.65$ respectively.

Overall, it was found that social work values (e.g. having a fair and considerate supervisor, pleasant co-workers and feeling esteemed by others) had the highest mean scores for both what individuals valued and for what organisations were perceived to supply. Conversely, status-related values (e.g. having influence and responsibility) were the least valued and also perceived as the least supplied values by organisations in the present sample.

With regard to P-O values fit, intrinsic (e.g. meaningful work) and extrinsic values (e.g. salary) had the highest means suggesting that individuals perceived there to be more of a discrepancy between their values and the values supplied by the organisation on these dimensions. Freedom-related fit (e.g. work/life balance) had the lowest mean suggesting participants reported better fit between these individual and organisational values.

3.3 Bivariate Correlations

In order to investigate the relationships between study variables at the bivariate level, a correlation matrix was produced (see Table 5). Hypothesised differences between variables are presented in their relevant sections below. There are several noteworthy observations that can be made from Table 5. Age was negatively related to all 'individual' work value scales and with social and freedom-related 'organisational' values, but age was positively correlated with the 'organisational' work value scales of intrinsic, status and altruism. Age was negatively associated with all measures of P-O values fit, especially status-related fit, suggesting that

younger workers reported lower levels of P-O values fit in this sample. Intention to leave was also negatively associated with age.

Most of the work value variables were positively correlated with each other, both for the 'individual' and 'organisational' scales. The only work values scales that did not correlate significantly were the 'individual' freedom work values with the 'organisational' intrinsic and status work values. Job satisfaction and affective organisational commitment were positively related to all work value scales. Significant negative relationships were found between 'organisational' work value items and intention to leave.

All values fit discrepancy scores showed significant negative relationships with job satisfaction and organisational commitment suggesting that the more values were supplied by the organisation, the higher the satisfaction and commitment. Discrepancy scores also showed positive relationships with intention to leave, where as the discrepancy increased between desired and supplied values, intention to leave also increased.

A strong positive relationship was also observed between affective organisational commitment and job satisfaction and strong negative relationships were found between these variables and intention to leave.

Table 5: Correlation matrix showing the relationships between study variables

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Age	1										
2. Extrinsic IWV	-.08	1									
3. Intrinsic IWV	-.09	.65**	1								
4. Status IWV	-.13**	.63**	.79**	1							
5. Altruism IWV	-.03	.55**	.63**	.52**	1						
6. Social IWV	-.10	.54**	.59**	.49**	.52**	1					
7. Freedom IWV	-.09	.51**	.46**	.38**	.53**	.51**	1				
8. Extrinsic OWV	.03	.27**	.27**	.27**	.21**	.18**	.16**	1			
9. Intrinsic OWV	.00	.15**	.43**	.34**	.19**	.19**	.08	.68**	1		
10. Status OWV	.04	.14**	.33**	.38**	.18**	.15**	.08	.72**	.86**	1	
11. Altruism OWV	.03	.18**	.30**	.29**	.30**	.17**	.18**	.68**	.68**	.73**	1
12. Social OWV	-.06	.10	.24**	.17**	.17**	.27**	.16**	.61**	.64**	.67**	.63**
13. Freedom OWV	-.03	.10	.21**	.17**	.22**	.25**	.33**	.56**	.52**	.54**	.58**
14. Extrinsic Fit	-.09	.57**	.29**	.28**	.26**	.28**	.27**	-.64**	-.47**	-.51**	-.44**
15. Intrinsic Fit	-.08	.37**	.37**	.29**	.31**	.29**	.29**	-.49**	-.67**	-.61**	-.44**
16. Status Fit	-.14**	.38**	.32**	.44**	.24**	.26**	.23**	-.49**	-.56**	-.67**	-.48**
17. Altruism Fit	-.05	.29**	.24**	.16**	.54**	.27**	.27**	-.43**	-.44**	-.49**	-.64**
18. Social Fit	-.03	.30**	.21**	.21**	.23**	.49**	.23**	-.42**	-.44**	-.49**	-.46**
19. Freedom Fit	-.05	.31**	.17**	.15**	.22**	.18**	.49**	-.39**	-.40**	-.44**	-.39**
20. Job Satisfaction	.06	.12	.21**	.18**	.14**	.18**	.09**	.66**	.69**	.73**	.68**
21. Organisational Commitment	.08	.16**	.24**	.25**	.16**	.11**	.04	.59**	.58**	.59**	.61**
22. Intention to Leave	-.15**	-.06	-.07	-.05	-.06	-.03	.03	-.49**	-.51**	-.47**	-.43**

Notes. ** $p < .01$

IWV (individual work values), OWV (organisational work values)

Discrepancy scores in bold: positive correlations indicate individual values were not met by the organisation; negative correlations indicate organisational supplies exceeded individual values

Table 5 Continued: Correlation Matrix showing the relationships between study variables

Variables	12	13	14	15	16	17	18	19	20	21	22
12. Social OWV	1										
13. Freedom OWV	.66**	1									
14. Extrinsic Fit	-.44**	-.40**	1								
15. Intrinsic Fit	-.45**	-.35**	.72**	1							
16. Status Fit	-.51**	-.39**	.72**	.83**	1						
17. Altruism Fit	-.43**	-.34**	.59**	.64**	.61**	1					
18. Social Fit	-.71**	-.42**	.60**	.62**	.65**	.59**	1				
19. Freedom Fit	-.48**	-.66**	.58**	.56**	.55**	.53**	.57**	1			
20. Job Satisfaction	.72**	.54**	-.47**	-.53**	-.56**	-.48**	-.52**	-.42**	1		
21. Organisational Commitment	.54**	.46**	-.38**	-.40**	-.38**	-.41**	-.41**	-.39**	.63**	1	
22. Intention to leave	-.45**	-.36**	.38**	.47**	.42**	.33**	.39**	.36**	-.58**	-.61**	1

Notes. ** $p < .01$

IWV (individual work values), OWV (organisational work values)

Discrepancy scores in bold: positive correlations indicate individual values were not met by the organisation; negative correlations indicate organisational supplies exceeded individual values

3.4. Hypothesis Testing

3.4.1 *Generational Differences in Work Values*

Table 6 provides the means and standard deviations for each of the six work value scales for each generation, and the work value items that comprised each scale. The range of scores for work values was from 1 (indicating the work values item was not at all a priority for respondents in their work) to 5 (indicating the factor was of top priority for respondents in their work). For the sake of this discussion, work values scores were categorised as: 1.0 – 1.99 (not valued), 2.0 – 2.99 (somewhat valued), 3.0 – 3.99 (valued), 4.0 and above (highly valued). As Table 6 shows, all work values were valued or highly valued by all of the generations. Below is a descriptive summary of the most and least important work values for each generational group.

The Mature/Boomer group valued a number of ‘intrinsic’ value items such as ‘using abilities’ in work and doing ‘fulfilling work’. Having ‘fair supervisors’ and feeling ‘esteemed’ by others, were valued highly as well as having ‘pride in craftsmanship’ in their work. The least important values for the Mature/Boomer group were ‘status’-related items including having ‘influence in the organisation’, ‘advancement’ and ‘job status’.

Generation X rated ‘intrinsic’ items such as ‘interesting work’ and ‘achievement’ as most important, as well as ‘fair supervisors’ and feeling ‘esteemed’ by others. Rated as least important were having ‘influence in the organisation’, ‘contributing to society’ and ‘job status’.

The Echo generation showed a very similar trend to the Generation X group with the ‘intrinsic’ value of ‘interesting work’ as being the most valued item overall, and the three ‘social’ values closely following. Least important values for this group included having ‘influence in the organisation’, receiving ‘benefits’ and making a ‘contribution to society’.

Table 6: Means and standard deviations of individual work values scores for the generational groups

	Matures/Boomers		Generation X		Echo	
	Mean	(SD)	Mean	(SD)	Mean	(SD)
Extrinsic Work Values	3.70	(.73)	3.84	(.63)	3.90	(.61)
Benefits	3.32	(1.14)	3.47	(1.11)	3.57	(1.00)
Salary	3.61	(.92)	3.92	(.88)	4.02	(.99)
Job security	3.82	(1.06)	3.96	(.96)	4	(1)
Technology	3.77	(.90)	3.84	(.86)	3.98	(.81)
Work Conditions	3.98	(.92)	3.95	(.87)	4	(.81)
Rewards based on competence	3.73	(1.04)	3.92	(.91)	3.83	(.82)
Intrinsic Work Values	3.87	(.65)	3.99	(.58)	4.06	(.62)
Intellectual stimulation	3.93	(.88)	4.14	(.77)	4.20	(.85)
Challenge	3.62	(.93)	3.82	(.89)	4.01	(.80)
Interesting	4.04	(.84)	4.24	(.73)	4.37	(.89)
Continuously learn	3.89	(.85)	4.14	(.82)	4.35	(.74)
Fulfilling	4.05	(.86)	4.15	(.81)	4.19	(.93)
Achievement	4.14	(.81)	4.22	(.72)	4.19	(.72)
Use abilities and knowledge	4.07	(.72)	4.17	(.66)	4.17	(.78)
Variety	3.74	(.88)	3.80	(.90)	3.82	(.87)
Creativity	3.65	(.93)	3.73	(.96)	3.86	(.95)
Feedback	3.62	(1.03)	3.78	(.88)	3.96	(.86)
Pride in Craftsmanship	3.99	(.91)	3.91	(.94)	3.89	(1.02)
Optimism	3.75	(.94)	3.83	(.89)	3.80	(.88)
Status-Related Work Values	3.49_a	(.75)	3.69_b	(.61)	3.77_b	(.62)
Regarded work	3.48	(.99)	3.68	(.95)	3.72	(.98)
Influence in work	3.69	(1.00)	3.76	(.89)	3.72	(.83)
Influence in organisation	3.17	(1.12)	3.26	(.92)	3.27	(.89)
Recognition	3.83	(.80)	3.94	(.82)	3.96	(.92)
Job status	3.16	(1.06)	3.44	(.90)	3.66	(.95)
Responsibility	3.70	(.96)	3.80	(.77)	3.75	(.78)
Advancement	3	(1.11)	3.65	(.98)	4.18	(.86)
Independence	3.91	(1.00)	3.97	(.79)	3.88	(.85)

Notes: Within each row, means with different superscripts are significantly different at $p < .05$

Mature/Boomer (n = 132), Generation X (n = 289), Echo (n = 83)

Table 6 Continued: Means and standard deviations of individual work values scores for the generational groups

	Matures/Boomers		Generation X		Echo	
	Mean	(SD)	Mean	(SD)	Mean	(SD)
Social Work Values	4.09_a	(.66)	4.19	(.63)	4.36_b	(.60)
Supervisor	4.16	(.84)	4.24	(.80)	4.36	(.69)
Co-workers	4.02	(.75)	4.12	(.77)	4.36	(.73)
Esteem	4.09	(.94)	4.20	(.82)	4.35	(.82)
Altruism Work Values	3.75	(.72)	3.70	(.73)	3.87	(.59)
Moral values	3.86	(.92)	3.85	(.99)	3.99	(.83)
Contribution	3.48	(.95)	3.31	(1.00)	3.57	(.94)
Fairness	3.93	(.90)	3.95	(.87)	4.06	(.69)
Freedom-Related Work Values	3.88_a	(.67)	3.88_a	(.74)	4.12_b	(.65)
Hours of work	3.79	(.99)	3.66	(1.03)	3.98	(.86)
Fun	3.73	(.83)	3.84	(.90)	4.07	(.85)
Balance	4.12	(.88)	4.13	(.90)	4.31	(.83)

Notes: Within each row, means with different superscripts are significantly different at $p < .05$

Mature/Boomer ($n = 132$), Generation X ($n = 289$), Echo ($n = 83$)

Hypothesis 1 investigated differences between generational groups on the six individual work values: extrinsic values, intrinsic values, status, social values, altruism and freedom. This hypothesis was supported for 3 of the 6 work values where a 3 x 6 MANOVA revealed significant multivariate main effects between generational groups (Matures/Boomers, Generation X and Echo) according to individual work values (Wilks's $\Lambda = .944$, $F_{12, 501} = 2.40$, $p = .005$, partial $\eta^2 = .028$).

Generational groups differed on 'status' work values where ($F_{2, 501} = 5.705$, $p = .004$, partial $\eta^2 = .022$) representing a medium effect. Tukey's post-hoc test revealed that the younger generations (the Generation X and Echo groups) placed more importance on 'status-related' work values than the older generations (Matures/Boomers) (see Table 6 for the mean scores).

There were also significant differences between generational groups on 'social' work values ($F_{2, 501} = 4.623, p = .010$, partial $\eta^2 = .018$) representing a medium effect. Tukey's (HSD) post-hoc test revealed that the youngest generation (the Echo group) placed more importance on 'social' work value items than did the Mature/Boomer group (see Table 6).

Groups differed significantly on 'freedom' work values where, $F_{2, 501} = 4.099, p = .017$, partial $\eta^2 = .016$, representing a medium effect. Tukey's (HSD) post-hoc test showed that the Echo group placed more importance on 'freedom'-related values than did the other generations (Generation X group and Matures/Boomers) (see Table 6).

No significant differences were found between generational groups on 'extrinsic', 'intrinsic', and 'altruism' work values at the $p < .05$ level of significance.

3.4.2 Generational Differences in Work-Related Outcomes

To test Hypotheses 2, 3 and 4, differences were assessed between generational groups on job satisfaction, affective organisational commitment and intention to leave. Mean differences between these outcomes and generational groups were tested using MANOVA to control for Type I error, with univariate analyses and Tukey's (HSD) post-hoc tests if differences were detected.

A 3 x 3 MANOVA showed that there was a significant main effect for differences between generational groups according to outcome variables (Wilks's $\Lambda = .961, F_{6, 501} = 3.31, p = .003$, partial $\eta^2 = .020$).

Hypothesis 4 was supported as there were significant differences between generational groups for 'intention to leave' ($F_{2, 501} = 6.302, p = .002$, partial $\eta^2 = .025$) showing a medium

effect. The post-hoc Tukey (HSD) test showed that the younger generations (Generation X and Echo groups) were more likely to leave the organisation in the next 12 months than the Mature/Boomer group (see Table 7).

Hypotheses 2 and 3 were not supported as no significant differences were found between generational groups for 'job satisfaction' and 'affective organisational commitment' at the $p < .05$ level of significance.

Table 7: Mean differences between generational groups on outcome variables

Outcome Variable	Mature/Boomer	Generation X	Echo
	Mean (SD)	Mean (SD)	Mean (SD)
Intention to Leave	2.52 ^a (1.39)	2.97 ^b (1.48)	3.20 ^b (1.61)
Job Satisfaction	3.67 (.68)	3.67 (.62)	3.55 (.59)
Affective Organisational Commitment	3.74 (.73)	3.60 (.75)	3.60 (.74)

Notes: Within each row, means with different superscripts are significantly different at $p < .05$

Mature/Boomer ($n = 132$), Generation X ($n = 289$), Echo ($n = 83$)

3.4.3 Generational Differences in P-O Values Fit

To test Hypothesis 5, differences in specific measures of P-O values fit between generational groups according to the 6 work values (extrinsic values, intrinsic values, status, social values, altruism and freedom) were examined. A MANOVA supported this hypothesis (Wilks's $\Lambda = .954$, $F_{12, 501} = 1.991$, $p = .022$, partial $\eta^2 = .024$).

As Table 8 shows, significant differences were found for 'extrinsic' work values ($F_{2, 501} = 3.76, p = .024$, partial $\eta^2 = .015$) with a medium effect, where the Mature/Boomer group reported smaller mean difference scores on 'extrinsic' work values, thus better fit (or less discrepancy between individual and organisational values), than did the Generation X group.

Significant generational differences were also found for P-O values fit of 'status'-related work values ($F_{2, 501} = 4.589, p = .011$, partial $\eta^2 = .018$). Post-hoc tests showed that the Mature/Boomer group reported smaller mean difference scores (better fit) on 'status'-related work values than the Echo group (see Table 8). No significant differences were found between generational groups according to P-O values fit on 'intrinsic', 'altruism', 'social' and 'freedom-related' values at the $p < .05$ level of significance.

Table 8: Mean differences between generational groups according to P-O values fit

Discrepancy Scores	Mature/Boomer	Generation X	Echo
	Mean (SD)	Mean (SD)	Mean (SD)
Extrinsic Fit	.45 ^a (.77)	.58 ^b (.85)	.64 (.75)
Status Fit	.41 ^a (.81)	.57 (.81)	.74 ^b (.78)
Intrinsic Fit	.60 (.69)	.71 (.77)	.80 (.73)
Social Fit	.56 (.90)	.56 (.83)	.66 (.95)
Altruism Fit	.54 (.79)	.56 (.93)	.68 (.78)
Freedom Fit	.45 (.80)	.55 (.96)	.54 (.82)

Notes: Within each row, means with different superscripts are significantly different at $p < .05$

Mature/Boomer (n = 132), Generation X (n = 289), Echo (n = 83)

3.5 Structural Equation Modelling

Figure 10 presents Model 1 without the endogenous variables (scale items), showing only the latent variables (indicated by ovals) and regression weights (single headed arrows). The model was tested using maximum likelihood estimation and statistical significance was assessed using both the regression weights and the fit statistics reviewed on pages 67 and 68. All assumptions for SEM were met as the data were continuous and normally distributed and the number of subjects per estimated parameter was acceptable (Bentler, 1995).

Hypotheses 6, 7 and 8 predicted that the degree of overall person-organisation values fit (based on discrepancy scores) would directly predict job satisfaction, affective organisational commitment and intention to leave. Hypothesis 9 predicted that, in the model, satisfaction would lead to commitment, and commitment would mediate the relationship between satisfaction and intention to leave (Hypothesis 10). Finally, Hypothesis 11 suggested that satisfaction and commitment would mediate a relationship between P-O values fit and leaving intentions.

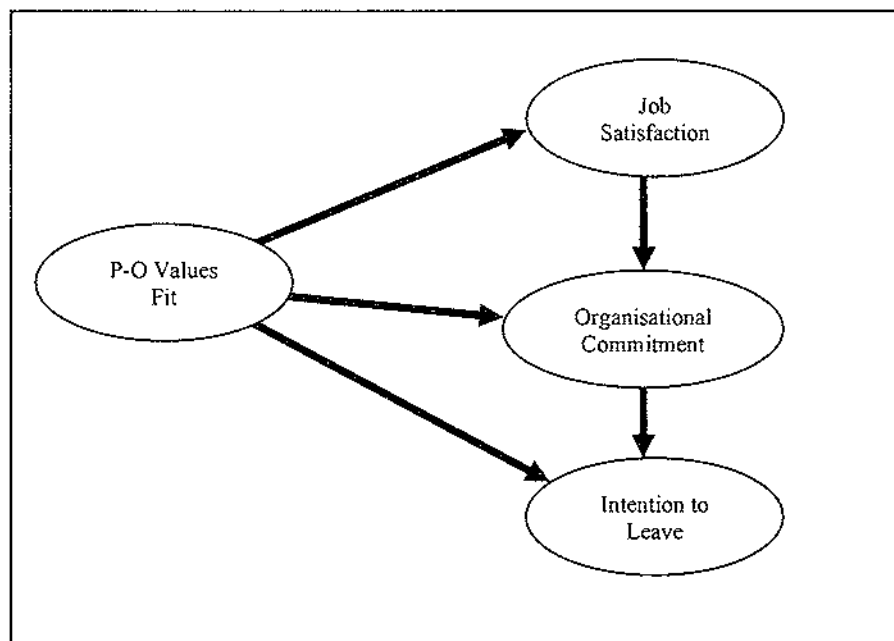


Figure 10: Model 1. Overall P-O values fit and work-related outcomes (latent variables only)

3.5.1 Significance of Regression Weights

One way to ascertain the significance of a regression path in a structural model is to inspect the critical ratio (C.R.) values for the regression weights. Byrne (2001) and Garson (2005) noted that in order for a critical ratio statistic to achieve statistical significance at the probability level of .05, the test statistic needs to be outside the range of ± 1.96 . The standardised regression weights and critical ratios for each regression path for Model 1 are presented in Table 9.

Table 9: Critical ratio (C.R.) values (parameter estimates divided by standard error) of the regression paths in Model 1

Regression Path	Critical Ratio (C.R.)	Estimate	Standard Error (S.E.)	Standard Regression Weight
P-O Values Fit → Satisfaction	-10.242*	-.442	.043	-.668
P-O Values Fit → Commitment	-.874	-.032	.037	-.046
P-O Values Fit → Intention to Leave	5.501*	2.389	.051	.141
Satisfaction → Commitment	7.963*	.757	.095	.707
Commitment → Intention to Leave	-12.979*	-2.389	.184	-.846

Notes: * C.R. values outside the range of ± 1.96 are statistically significant ($p < .05$)

With regard to P-O values fit: *positive correlations* indicate individual values were not met by the organisation; *negative correlations* indicate organisational supplies exceeded individual values.

All but one of the critical ratio values for the regression weights were significant. The path from 'P-O values fit → affective organisational commitment' was non-significant at the .05 level and so the model was respecified without this path. Table 10 reports the critical ratios of the respecified model.

Table 10: Critical ratio (C.R.) values (parameter estimates divided by standard error) of the regression paths in Model 1 when specified with non-significant regression path removed

Regression Path	Critical Ratio (C.R.)	Estimate	Standard Error (S.E.)	Standard Regression Weight
P-O Values Fit → Satisfaction	-10.295*	-.445	.043	-.672
P-O Values Fit → Intention to Leave	5.914*	.295	.050	.148
Satisfaction → Commitment	8.912*	.794	.089	.740
Commitment → Intention to Leave	-13.036*	-2.374	.182	-.844

Notes: * C.R. values outside the range of ± 1.96 are statistically significant ($p < .05$)

With regard to P-O values fit: *positive correlations* indicate individual values were not met by the organisation; *negative correlations* indicate organisational supplies exceeded individual values.

Figure 11 shows the final model, Model 2, presenting the latent variables and significant regression weights. The standardised regression weights or correlation coefficients are shown with each path. All paths are significant at the .05 level.

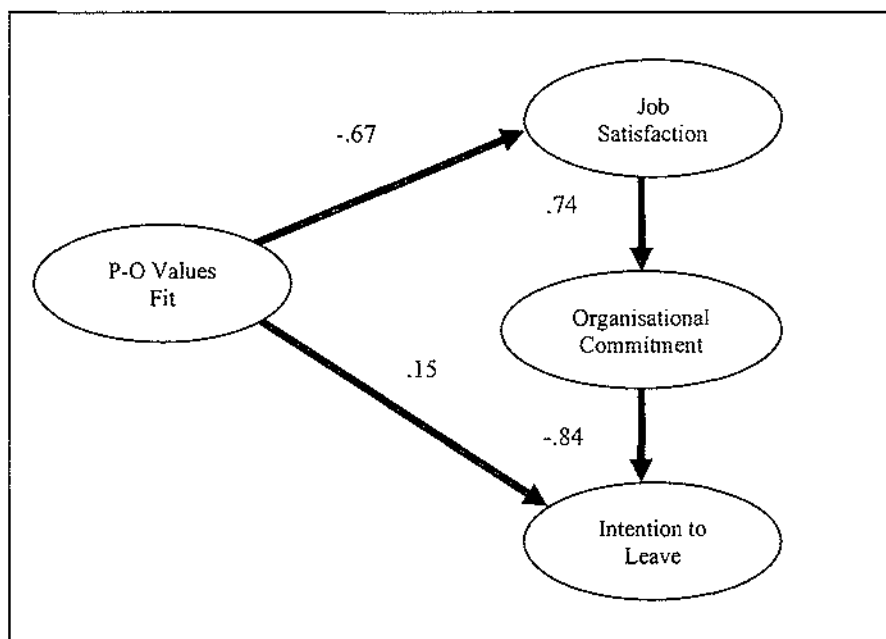


Figure 11: Model 2. SEM results of the P-O values fit and work-related outcomes model

3.5.2 Fit Statistics for Model 1 and Model 2

In order to ascertain whether the hypothesised models were consistent with the data in the present study, goodness-of-fit was assessed. If adequate goodness-of-fit existed according to the fit statistics, then it is possible to argue the existence of these proposed relationships between variables. Table 11 shows the fit indices for the two models.

Table 11: Fit indices for Model 1 and Model 2. P-O values Fit and outcomes (job satisfaction, affective organisational commitment and intention to leave)

	χ^2	<i>df</i>	TLI	CFI	RMSEA
Model 1	1740.96	296	.953	.960	.099
Model 2	1741.70	297	.953	.960	.098

Note. TFI = Tucker Lewis Index; CFI = Comparative Fit index; RMSEA = Root Mean Square Error of Approximation

There was little change in fit once the non-significant path was dropped. For the sake of parsimony, a slight improvement in the RMSEA, and the importance of the critical ratio values, Model 2 was employed. Taken together, the goodness of fit statistics reported in this section indicate that the proposed model was a reasonable fit to the data.

3.5.3 Summary of the Relationships between Variables in the Proposed Model

As expected, P-O values fit was related to job satisfaction. As the level of discrepancy between individual and organisational values increased there was a decrease in job satisfaction. P-O values fit did not have a direct relationship with affective organisational commitment, but this association was mediated by job satisfaction. Satisfaction was also positively related to organisational commitment and the satisfaction/intention to leave relationship was mediated by

organisational commitment. Values fit showed a small positive relationship with intention to leave suggesting that as values discrepancy increased, intention to leave increased. The relationship between fit and intention to leave was also mediated by job satisfaction and organisational commitment.

The analysis of Model 2 is consistent with the notion that fit will lead to job satisfaction which will contribute to organisational commitment which will, in turn, impact on leaving intentions.

3.6 Model Testing for Invariance across Age

Hypothesis 12 investigated whether the relationship between values fit and outcomes would be moderated by age. The procedure used was to test for measurement invariance between the unconstrained model (baseline model), and a model where parameters were constrained to be equal between groups (Byrne, 2001). The data was split into an 'older' (Mature/Boomer, $n = 132$) and 'younger' group (Generation X and Echo, $n = 372$). The single item indicator for intention to leave was not included in the invariance model as it only had three items so $df = 0$, and AMOS was unable to find a solution within the maximum number of iterations. The model was respecified by omitting the ITO indicator and renamed Model 3 (Figure 12).

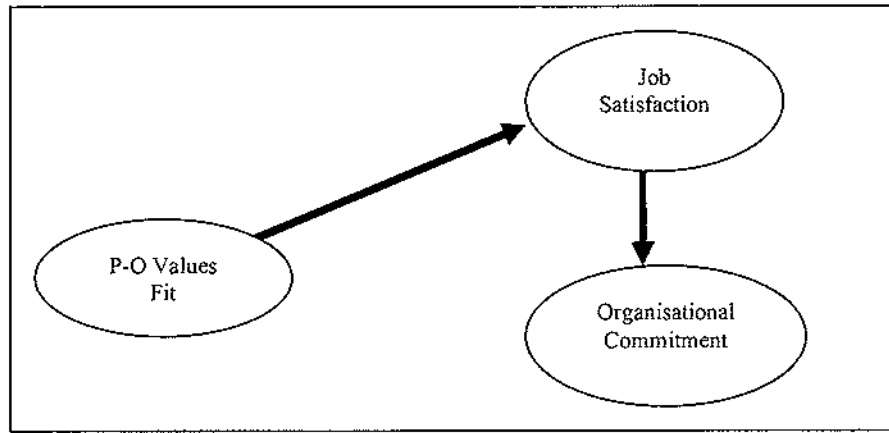


Figure 12: Model 3. The model tested for invariance across age groups (latent variables only)

The baseline model, which determined goodness-of-fit for the two groups in combination and had no equality constraints imposed, showed excellent fit ($\chi^2 = 1319.63$, $p < .001$; $df = 544$; $TLI = .974$; $CFI = .978$; $RMSEA = .053$). To test for invariance across groups, equality constraints were specified by labelling all parameters in the model equal across the two groups. If the change in chi square was significant between the fit of the two data sets to the baseline and comparative models, the models could be judged to be significantly different (Byrne, 2001). From Table 12, the change in chi-square: ($\Delta \chi^2 = 43.4$, $df = 24$, $p > .05$) was non-significant meaning Model 3 was invariant (not significantly different) across age groups.

Table 12: Chi-Square statistics for tests of invariance across older and younger groups

Casual Fit Model	Baseline Model ₁		Comparative Model ₂		$\Delta \chi^2$	Δdf	Sig.
	χ^2	df	χ^2	df			
Older verses Younger	1319.63	544	1363.04	568	43.4	24	ns

Note: ₁ no equality constraints imposed; ₂ factor loadings, betas and means are constrained as equal; $\Delta \chi^2$, difference in χ^2 values; Δdf , differences in degrees of freedom

The invariance of the model is also supported by the similarity between the fit statistics of the baseline and comparative models presented in Table 13.

Table 13: Goodness-of-fit statistics for the baseline and comparative models

Casual Fit Model	TLI	CFI	RMSEA
Baseline Model ₁	.974	.978	.053
Comparative Model ₂			
Equal Loadings	.974	.978	.053
Equal Betas	.973	.976	.054
Equal Means	.973	.976	.054

Note: ₁ no equality constraints imposed; ₂ factor loadings, betas and means are constrained as equal

3.6.1. Summary of Invariance Testing Across Age

The invariance testing indicated no differences between older and younger generations for the fit of Model 3 to the data. However, this conclusion must be interpreted with caution as the sample size of the older group ($n = 132$) was slightly below the requirements for SEM and the sample was heavily weighted in the younger group.

4.0 DISCUSSION

This section presents a discussion of the findings of this thesis and the importance of these to the understanding of generational differences at work. The discussion is organised in the following way: first, the results of the present study are reviewed in relation to hypotheses and existing findings. Second, methodological limitations are discussed with possible suggestions for future research. Finally, the practical implications of these findings are offered along with concluding comments.

4.1 The Present Research

Previous research in the fields of psychology, sociology (e.g. Howe & Strauss, 2000; Lyons, 2004; Smola & Sutton, 2002; Zemke et al., 2000), and social commentary presented in the media (e.g. Grossman, 2005) suggest that generations can be defined by certain work values. It has also been suggested that these differences may help explain conflict and communication difficulties between age groups in the work place. To the present author's knowledge, no such studies have been conducted in New Zealand, nor have all generations in the workforce been assessed according to differences in work-related outcome variables (job satisfaction, organisational commitment and turnover intentions). Furthermore, although research has consistently reported relationships between P-O values fit and work-related outcomes (e.g. Taris & Feij, 2001; Kristof, 1996; Meglino et al., 1989), how age may moderate these relationships has not previously been examined.

The purpose of this research was to respond to these issues and investigate differences in work values, job satisfaction, affective organisational commitment and intention to leave,

between generational groups in the New Zealand workforce. The study also examined differences between generations on measures of P-O values fit. A model of overall values fit was also tested and assessed to examine whether age moderated the relationships between values fit and outcome variables.

4.2 Research Findings

4.2.1 Generational Differences in Work Values

The first hypothesis of the present study predicted differences between generational groups on work values. Significant inter-generational differences were found on three of the six work values. In particular, work values involving status, social environment aspects and freedom differed between generational groups, but extrinsic, intrinsic and altruism work values did not. Possible explanations for these findings are presented below.

Status-Related Work Values

It was found that the younger generations (Generation X and Echo) placed more importance on status-related work values than did the older group (Mature/Boomer). This was interesting given that the literature has tended to present the older generations as interested in status as a mark of achievement and organisational rank, as it defines where an employee sits in the hierarchy of an organisation (Adams, 1998; Lancaster & Stillman, 2002). In contrast, younger age groups have been reported to view the traditional routes to obtaining status, such as through age and title, as being less applicable to the present time (Adams, 1998; Sunoo, 1995).

It may be relevant to consider the influence of career stage to help explain this finding. It is possible that the Mature/Boomer group may be currently at a career stage which provides them with status so they do not feel the need to earn this. In support of this, Riordan et al. (2003) noted that older employees in high-status positions tend to benefit by receiving job assignments and perks associated with being in the profession longer and simply by being older. Thus, as this group may be receiving status from their work and organisations, it may no longer be desired and highly valued.

Conversely, it has been suggested by social commentators and generational theorists (e.g. Barnard, Cosgrave & Welsh, 1998), that younger generations may be more focused on establishing their legitimacy as contributors to the workplace than were older generations at that same age. The current competitiveness of the labour market may mean that the attainment of status may provide visibility with which to aid progression and add to the marketability of these groups. An additional explanation may be that these groups hold such values due to their social upbringing which has been said to instil high expectations from life and work (Bibby, 2001; Howe & Strauss, 2000). Thus, although the traditional routes to obtaining status may not be adhered to by the younger groups, these values may be a priority for them at work.

When looking at the specific items comprising the status work values scale, the values rated highest by the Mature/Boomer group were 'recognition' and 'independence'. This may reflect this group's desire to 'leave their mark' and self-manage as they move towards retirement. 'Recognition' was one of the most important status-related values for the Echoes and Generation X. This is likely to reflect concerns about moving up quickly within the organisation and receiving feedback for good work rather than building a legacy within the company like the older groups. Generation X also rated 'independence' more highly than the other groups

indicating a preference for a more individualised approach to work, supporting past studies (e.g. Barna, 1992; Jurkiewicz, 2002; Jurkiewicz & Brown, 1998). Based on these interpretations, it is possible that values such as status have different meanings for each age group based on their generational frame of reference.

Social Environment Work Values

Although social environment work values were the most important set of values for the present sample, significant inter-generational differences were also observed. The scale items included having a fair and considerate supervisor, pleasant co-workers and feeling esteemed as a person. The Echo generation valued social-related items significantly more than the Mature/Boomer cohort, supporting the findings from past research (e.g. Barnes, 2003; Karp et al., 2001; Lyons, 2004). This younger generation is said to place importance on team relations and quality supervision so that learning is maximised (Barnes, 2002). A recent New Zealand media release by Robert Half Finance and Accounting noted that the number one reason the Echo generation gave for leaving their jobs was dislike of their manager or boss (Close, 2005). In line with this, the Echo group rated having a good supervisor/manager as the most important social-related work value in the present study.

Out of all the social-related values, the Mature/Boomer group rated good supervisor relations as most important. Zeltin (1992) noted that as the workforce ages, older adults have an increasing likelihood of being managed by younger individuals who may have different motivations and work values. The challenge for supervisors and managers is not to 'under manage' older employees by lowering performance expectations and reducing monitoring of productivity, but to understand the motivations of each group, so that management styles can be

adapted accordingly (Buonocore, 1992). Understanding the differences between younger and older workers may allow supervisors of older adults to perform more effectively and be more cognisant of the needs of older workers (Kelly, Chusmir & Laurie, 1990).

Freedom-Related Work Values

The finding that the youngest generation (Echo) placed more importance on freedom-related work values than the oldest group (Mature/Boomer) has been well supported by the literature (e.g. Finegold et al., 2002; Howe & Strauss, 2000; Zemke et al., 2000). The Matures and Baby Boomers have been said to be focused on a traditional work model that involves dedication and working hard in order to achieve (Barnes, 2003; Smith & Clurman, 1997; Smola & Sutton, 2002; Zemke et al., 2000). This has led to the perception of these generations, particularly the Baby Boomers, as being “workaholics” (Lancaster & Stillman, 2002; Zemke et al., 2000). It has also been suggested that although there has been a global movement towards the importance of work/life balance, these generations may appreciate the shift, but find it difficult to adhere to (Lancaster & Stillman, 2002).

In contrast, the Echo group is known to place high importance on work/life balance and expect such a focus in their working lives (Burgham & Callister, 2004; Raines, 1997; Smola & Sutton, 2002). Close (2005) noted that this group tends to seek out employment opportunities that will supply freedom and balance, and will be prepared to leave the organisation if these needs are not met. Additionally, the Echo group are thought to be the first generation to value having fun in the workplace (Loughlin & Barling, 2001; Zemke et al., 2000). This interest in fun and social activities also links with past studies suggesting that the Echo group has an

appreciation of diversity and strong interest in bringing various people together to support a common goal (Burgham & Callister, 2004).

It was surprising that Generation X placed less emphasis on freedom-related work values than the Echo group. Generation X has been widely noted as a group focused on achieving balance and it was expected from the literature that there would be no differences between these two younger groups (Raines, 1997; Smola & Sutton, 2002). One interpretation of this unexpected finding, which cannot be tested with cross-sectional data, is that this group may have chosen to work for organisations that allowed them to balance their work and personal lives while still advancing in their careers (Conger, 1998). As a result of this, freedom may be a value that is automatically received by this group, rather than being highly desired and valued.

It could be suggested that freedom can be classed as a distinctive generational value based on generational theory, as although there has been an increasing focus on work/life balance in recent times, individuals of different ages are likely to view this phenomenon differently due to different social experiences (Mannheim, 1952). Although Cox (1999) reported that more workers of all ages desire a strong work/life balance, it may be truly valued by those of the youngest generation due to their developmental circumstances and frame of reference as a generation.

Extrinsic, Intrinsic and Altruistic Work Values

While the literature suggested that there would be generational differences according to extrinsic work values such as salary and benefits, this was not evident in the present study. It could be suggested, however, that each generation may value extrinsic aspects such as pay for

different reasons (Lyons, 2004). For example, the Echo group could view salary as a means to freedom, whereas it could symbolise achievement for the Boomer group and status for the Generation X group. Further qualitative analysis is necessary to determine the accuracy of such propositions.

Additionally, no statistically significant differences were found between generations according to intrinsic work values, with each generation rating these values reasonably highly. This could be due to the demographic makeup of the sample, where over half of the participants had obtained some kind of university degree. Previous studies have found that regardless of generational groupings, more educated samples tend to place more importance on intrinsic values, due to the interest in self-fulfilment through the content of work (Miller & Yu, 2003). Based on this, it would be interesting to look at inter-generational differences across industry and educational level to examine how such variables may influence work values.

Finally, there were no differences between generational groups on altruism work values. Some research suggests that the Mature generation feels a need to give back to society based on developmental events, such as the war and a more traditional view (e.g. Ryff & Baltes, 1976). However, as there were too small a number of Matures to conduct any meaningful analyses, this assumption could not be tested. It is also possible that the stereotype of the Echo group as seeking work that gives back to society is inaccurate (Burgham & Callister, 2004; Tapscott, 1998; Zemke et al., 2000). Rather, it may be the content of the work and whether it is personally fulfilling (i.e. intrinsic values) that are more important to these generations.

Overall, these findings revealed some inter-generational differences in work values. It is noteworthy that most of the key differences were found between the youngest and oldest generations supporting previous studies (e.g. Adams, 1998; Na & Cha, 2000; Na & Duckitt,

2003). Inglehart (1997) proposed that value changes are occurring much more quickly in younger generations (such as Generation X and Echo) than in older generations (Matures and Boomers), meaning that value differences between generations have tended to increase. This links with the notion of generations forming in 'actuality' when social events have differing impacts on individuals at different ages, creating age-related social bonds (Eyerman & Turner, 1998; Laufer & Bengston, 1974; Mead, 1978). A gulf can develop between those who are experiencing social change first hand through developmental experiences and those who are more removed from the process due to being older.

4.2.2 Generational Differences in Work-Related Outcomes

Age has been consistently linked with work-related outcome variables including job satisfaction, organisational commitment and intention to leave, but little research has examined how particular generational groups may differ according to such variables. As a response to this, a series of hypotheses were tested.

Intention to Leave

As expected, significant differences were found between age groups according to leaving intentions. The youngest groups (Generation X and Echo) rated their intention to leave within the next 12 months as higher than the older group (Matures/Boomers). Research has suggested that older workers are retiring later than ever before (McGregor & Gray, 2004), and may perceive fewer alternative employment options, which can lead to the tendency to stay in an organisation (Riordan et al., 2003; Warr, 1994). Other studies have shown that older workers

tend to remain unemployed for longer than younger workers, independent of levels of job-search intensity (Wanberg, Watt & Rumsey, 1996). Accordingly, Brown, Jose, Ng and Guo (2002) reported that an important issue for older workers (aged between 50 and 65) was that of redundancy and its possible impact on well-being.

The Echo group and Generation X have been described as having a frame of reference that is more career-loyal and less company-loyal, the opposite of the older generations (Close, 2005). Having a career model which accepts job security as being uncertain and adaptability as necessary for career survival, these groups are said to be prepared to move companies based on an interest in personal growth and independence (Zemke et al., 2000). Sullivan, Sullivan and Buffton (2002) also noted that younger generations tend to be more aware of their own values and pay significantly more attention than older groups to how their values and needs might be fulfilled when looking at career options or potential employers. It is possible that these employees are seeking a different kind of psychological contract with employers, based on being able to learn, develop, and have visibility within the organisation from an early stage.

Affective Organisational Commitment

It was surprising that no generational differences were found for affective organisational commitment given the research suggests that younger employees are significantly less committed to their organisations than older generations (Daboval, 1998; Jennings, 2000; Lyons, 2002; Mathieu & Zajac, 1990; Miller & Yu, 2003). It is possible that younger generations are committed during their tenure with various organisations, but understand the importance of moving on and responding to the demands of the new 'protean' career (Hall & Mirvis, 1996).

However, only one form of commitment, affective organisational commitment, was assessed in this study. It is possible that generations may differ according to other forms of organisational commitment, such as 'continuance' commitment (personal awareness of the costs involved with leaving the organisation), and 'normative' commitment (a feeling of duty to remain, possibly due to social or familial obligations) (Meyer & Allen, 1991). These are possible avenues for future research and could explain more about the nature of generational differences at work.

Job Satisfaction

Finally, no evidence was found to suggest that generational groups differed on levels of job satisfaction. This is inconsistent with past research, which suggests a positive relationship between age and job satisfaction (e.g. Warr, 1994). Nevertheless, previous studies have often suggested differences between age groups based on a facet approach to measurement, whereas the present study employed a global approach. For instance, Finegold et al. (2002) found that satisfaction with skill development was more important for individuals aged 30 and under, in terms of willingness to change firms, than other age groups. It may also be that satisfaction with particular values is important for each generational group. These areas may be topics of interest in future research.

It is also possible that other variables may moderate the relationship between these work-related outcomes and generational groups. Riordan et al. (2003) found that as employees aged, their job satisfaction, organisational commitment and intention to leave were influenced by other variables such as pay and job level. These findings, as well as those obtained in the present study, suggest that in order to clearly characterise and understand the relationship

between generations and such work-related outcomes, future research needs to investigate the interaction between age groups and situational characteristics within the organisation (Riordan et al., 2003).

4.2.3 Generational Differences in P-O Values Fit

There has been a focus in previous research on the importance of employees sharing their organisations' values in order to promote positive outcomes (Bryce, 2002; Miller & Yu, 2003). Issues around attaining values congruence among staff, particularly as the individual values of the employee play a large role in the acceptance of the organisation's values, have been discussed. The Theory of Work Adjustment (Dawis & Lofquist, 1984) suggests that the culture and values of the organisation tend to be communicated through supplies and rewards offered by the 'work environment structure'. Schein (1992) further postulated that the values of the organisation's influential members tend to represent the culture of the organisation. Miller and Yu (2003) noted that the Matures and Baby Boomers are the generational groups currently holding the majority of these influential positions, a trend which was confirmed in the present study. This introduces the potential for conflict between the values of older and younger groups. The present study hypothesised that there would be differences between generational groups according to P-O values fit on the work value scales. Results showed significant differences between age cohorts on perceived P-O values fit on two of the six work values.

Firstly, the Mature/Boomer group reported higher levels of P-O values fit according to extrinsic work values (such as pay and benefits), than the Generation X group. It is possible that given their career stage, the older generations may receive higher salaries and more benefits than the younger generation, thus reporting better fit with such values. Alternatively, the Generation

X group may feel that despite their skills, they are not supplied with rewards to the same extent based on their level within the organisation's hierarchy. This may be linked with the Generation X perception that rewards should be earned according contribution, rather than being based on tenure or age (Adams, 1998; Sunoo, 1995).

Secondly, the Mature/Boomer group also reported better fit between individual and organisational status-related work values than the Echo group. Despite placing more importance on status values, it may be that the Echo group does not receive these in their organisations based on the traditional model of earning status over time. Hence, the Echo group may rate values such as advancement and chances for promotion higher than the Mature/Boomer group, but due to their career stage, they are unlikely to be receiving these opportunities as quickly as anticipated. Additionally, although the Mature/Boomer group have been found to place less importance on individual level status-related items, they may be at a more advanced career stage compared with other generations, and so are provided with such values from their organisation (Riordan et al., 2003).

There were no significant differences between groups according to P-O values fit for intrinsic, altruism, social and freedom-related work values. In particular, it was found that good supervisors, friendly co-workers and feeling esteemed as a person were values supplied by many organisations in the present study.

Overall, these findings suggest that there are some differences between generations according to specific measure of P-O values fit. While it is suggestive that career stage or tenure, as well as generation, may be playing a role in such differences, this is difficult to determine without qualitative information.

4.2.4 Modelling Overall P-O Values Fit and Work-Related Outcomes

The model developed for this study was based on the Theory of Work Adjustment (Dawis & Lofquist, 1984) and other related research (e.g. Cable & DeRue, 2002; Kristof, 1996; Meyer & Allen, 1991; Meyer et al., 1998). It was hypothesised that job satisfaction, affective organisational commitment and leaving intentions would be outcomes of overall perceived P-O values fit, and that satisfaction would be positively related to affective organisational commitment and that both of these variables would mediate intentions to leave. Model 1 was not supported by the data. However, the fit statistics and regression weights supported an adapted version of the original model (Model 2).

In line with past research, the final model showed that overall P-O values fit had a strong direct relationship with job satisfaction and a small direct association with intention to leave (Bretz & Judge, 1994; Taris & Feij, 2001; Taris et al., 2005; Verquer et al., 2003). This lends support to the Theory of Work Adjustment (Dawis & Lofquist, 1984), which suggests that positive correspondence (or 'fit') between individual and organisational characteristics should increase job satisfaction and reduce intentions to leave (Bretz & Judge, 1994).

Interestingly, the model did not support a direct relationship between P-O values fit and affective organisational commitment, contrary to past research (e.g. Kristof, 1996 for a review). This suggests that individuals experiencing P-O values fit may not necessarily be more committed to the organisation, but may feel more satisfied which in turn promotes affective commitment (Morrison, 2005). This finding that overall P-O values fit seems to be indirectly related to affective organisational commitment, through enhanced job satisfaction, aids in the understanding of processes behind these relationships.

In addition, job satisfaction was found to have a significant positive relationship with affective organisational commitment. This links with previous research which has suggested that an employee is unlikely to experience commitment without first feeling satisfied as organisational commitment is said to take significantly longer to develop (e.g. Porter et al., 1974). The satisfaction-to-commitment relationship in the present study also supported other studies using structural equation modelling which have produced similar results (e.g. Williams & Hazer, 1986).

Following on from this, there was support for a mediated relationship between job satisfaction and affective commitment in predicting leaving intentions. This can be linked with previous studies which have found that job satisfaction only explains a small portion of the variance in intention to leave (e.g. Mobley et al., 1979), with affective commitment being more strongly predictive of leaving intentions (Meyer et al., 2002). Additionally, Somers (1995) found that affective commitment emerged as the sole predictor of turnover and absenteeism.

Finally, it was found that job satisfaction and affective organisational commitment mediated the relationship between overall P-O values fit and intention to leave the organisation. This was expected, given the evidence that job satisfaction is related to P-O values fit according to the TWA, and that organisational commitment is a possible outcome of job satisfaction (Dawis & Lofquist, 1984; Porter et al., 1974).

In sum, the final model suggested that overall P-O values fit may lead to positive experiences such as job satisfaction, and consequently affective organisational commitment, which may reduce unfavourable outcomes such as leaving intentions. In particular, the model suggested that job satisfaction and intention to leave are possibly direct outcomes of P-O values

fit and that affective organisational commitment may be an important mediator between the experiences of P-O values fit, job satisfaction and turnover intentions.

4.2.5 Age as a Moderator of P-O Values Fit

There has been evidence to suggest that if P-O values fit varies according to the strength of different work values held by various age groups, then these cohorts may experience the overall process of values fit differently (Locke, 1976). It was hypothesised that the model of overall P-O values fit and work-related outcomes would be noninvariant (different) across generational groups. The intention to leave variable was excluded from the analysis and so only a portion of the model was tested (Model 3).

The findings indicated invariance in the model between older (Matures/Boomers) and younger groups (Generation X and Echo). Therefore, P-O values fit was related to positive outcomes regardless of age, and the model was cross-validated lending support to the process of fit. This indicates that although work values and specific measures of P-O values fit may differ across generational groups, the relationships between overall P-O values fit, job satisfaction and organisational commitment were consistent across age groups. Therefore, if organisations are able to meet the needs of diverse employees of different ages based on their work values, this is likely to contribute to positive outcomes such as job satisfaction and affective organisational commitment.

4.3 Limitations of the Study and Directions for Future Research

The present study has several limitations which should be considered when interpreting the findings, and can be viewed as possible directions for future research. One limitation of the present study was that data for all the study variables were collected via self-report. Given the nature of the construct being investigated, this is a popular method of measurement (Spector, 2003). However, as all measures originated from the same source (i.e. the questionnaire) this may have resulted in contamination through common method variance, where influences such as acquiescence biases (where respondents tend to agree or disagree with questionnaire items independent of their content) may have occurred (Podsakoff, MacKenzie, Lee & Podsakoff, 2003; Podsakoff & Organ, 1986). Future research using a broader range of outcome indicators such as productivity data and actual turnover information may help to overcome this issue.

Another concern with self-report measures is the phenomenon of social desirability bias, in which respondents over-report admirable attitudes and under-report those they feel are not socially respected (Crowne & Marlowe, 1964). However, efforts were made to control this in the present study. Firstly, it was made clear to study respondents that their data would be completely anonymous, which tends to reduce this bias (Joinson, 1999). Secondly, most of the data collection was done via a web-based version of the questionnaire. Research by Matheson and Zanna (1988) showed that once participants are assured of anonymity, online surveys have been found to produce more honest responses due to increased private self-awareness when compared with pencil and paper-based versions. Thirdly, participants had little motivation to respond in a socially desirable way in the current context as the circumstances did not provide any motivation to do so. For instance, if it was a recruitment context participants might be inclined to rate highly those values they deemed salient to the recruiting organisation. Finally,

the use of the priority scale would have minimised these social desirability effects, where respondents were instructed to base their selection of values on priority rather than importance.

As mentioned throughout this thesis, much of the previous research in this area has been anecdotal or stereotypical in nature. There is a need for more empirical research in this field in order to move away from generational stereotypes. It is also necessary for this research to consistently define generational boundaries, such as those used in the present study, to help studies move forward in a reliable and incremental way. It would also be valuable to take into account the possible influence of ‘cuspers’ (those individuals who are born close to generational divides), and ‘units’ within generation groups to assess intra-generational patterns in work values.

Another informative avenue for future research besides quantitative collection of data is controlled, qualitative investigations. Such research would help to understand why certain values are held by generations and for what purpose, giving richer meaning to interpretations. Qualitative data collection and analysis are needed to further understand the psychological constructs that form these work values factors. Understanding what truly motivates the selection of values at work for different age groups would also help address some of the more stereotypical views of generations presented in the media. A more thorough investigation of the relationship between work-related outcomes and generational groups is also needed. Qualitative information around reasons for differences or non-differences in these outcomes would be valuable.

There was a lack of control in the present study over variables other than generational differences, which may have been influencing results. For instance, gender, personality and culture may be important factors to consider when examining the differences in work values,

outcomes, or P-O values fit across generations. Additionally, it was difficult to ascertain whether observed differences between age cohorts were linked to life-cycle, career stage factors, or genuine generational differences. Future research could focus on including these factors and other life-style factors, such as number of children and marital status, to see how much these variables contribute to generational differences (Finegold et al., 2002). This may also help to tease out the salience of generations as social cohorts by assessing whether values are consistent across such groups when these variables are included.

The current research was also restricted by its cross-sectional design. This can be limiting, particularly as P-O values fit is said to be a process that develops over time (Dawis & Lofquist, 1984). Although the use of structural equation modelling is a powerful way to statistically measure relationships, one cannot imply causation from this study (Byrne, 2001). Longitudinal examinations of the role of age in the P-O values fit process and the importance of demographic similarity between generational groups are also warranted. It may be valuable to directly identify demographic profiles of employees and influential managers within the organisation over time. This would provide an additional component to the measurement of the experience of fit and relationships with associated outcomes.

Finally, it should be noted that the results of the final hypothesis in this study must be interpreted with caution. While Model 3 was found to be invariant across age, the division of the sample into older and younger groups resulted in a disproportionate number in the older cohort compared to the younger group, where the final number in the older cohort was slightly below the requirements for SEM. Also, the loss of the intention to leave variable due to statistical issues resulted in only a portion of the model being tested. Future research could aim to test a

similar model with an intention to leave scale with more than three indicators and larger and more equal representations of each generational group.

4.4 Practical Implications

The Mature/Boomer, Generation X and Echo generations were found to possess some significantly different work values. This corresponds with generational theory, which proposes that a cohort of people born within a defined period of time hold different values from another cohort born in another defined period of time, based on social and historical experiences (Mannheim, 1952). These work value differences can serve as a platform for human resource practitioners and managers to close significant value gaps through various programs (Eslinger, 2001). For instance, where supervisors and managers have historically been trained in such practices as time management, it would be beneficial for organisations to also focus on training these leaders on life-span development and generational differences. This will allow managers and supervisors to have an appreciation of what motivates employees of all ages in their work and help businesses remain competitive in the war for talent.

Generational differences were found in intent to leave the organisation, with the younger groups being more inclined than the oldest group to report leaving intentions, but no differences were found for job satisfaction or affective organisational commitment. Thus, while being just as committed and satisfied as the other age groups, the Generation X and Echo group were more inclined to change organisations. An implication of this finding is that companies should recognise that these younger groups are more likely than older groups to leave the organisation, as they are possibly more 'career mobile'. Organisations should plan for such eventualities whilst doing their best to get the most out of every employee. It is also necessary for

organisations to understand that these younger age groups may be interested in a different type of psychological contract with the organisation than previous generations, one which emphasises freedom, status and social involvement. Awareness of such expectations can help organisations move towards a different model in order to attract and motivate younger employees (Close, 2005; Neale, 1999).

It is vital that organisations not only work to recruit young employees, but do their best to also meet the needs of older workers, considering the increase in the retirement age (McGregor & Gray, 2004) and findings of the present study. It is thus important to address situations where older workers may be managed by younger employees, to find commonalities and to develop better ways to communicate and work (Zeltin, 1992).

The Mature/Boomer group tended to report higher levels of P-O values fit than the younger groups. The Generation X group perceived there to be more of a discrepancy between their extrinsic work values and the extrinsic values supplied by their organisation, than the Mature/Boomer group. This is possibly due to career stage within the organisation where the more advanced generation may receive more rewards based on job position (Riordan et al., 2003). Furthermore, status was a value rated as being important to the Echo group and this value was perceived to be lacking by the organisation, while the Mature/Boomer group rated the value of status less, but perceived it to be more available. This dynamic is just one of the factors that can add to the conflict between generations in organisations, where a value may be held important by one group and not received, and held less important by another group, but highly supplied. Based on this, it would be important for organisations to be open with their employees about the criteria used to determine how such supplies are distributed and the time it typically

takes to receive these. Discussing these aspects with staff may help to avoid disappointment and conflict and also help manage expectations from the outset.

The findings of this study also lend support to the associations between P-O values fit and work-related outcomes as postulated by the Theory of Work Adjustment (Dawis & Lofquist, 1984). Companies should be aware that a good fit between an individual's values and the values espoused by their organisation may help to reduce leaving intentions, through increased satisfaction and commitment. This suggests that individuals should work for organisations whose values are perceived to be similar to their own in order to promote such positive outcomes.

Building on this, overall P-O values fit was found to be important for job satisfaction and affective organisational commitment across all age groups. As well as linking with the ideas presented above, that good P-O values fit is important for producing positive outcomes, this finding also highlights that it is important to maintain some diversity within organisations based on work values in order to encourage innovation and competitiveness (Kristof, 1996). Too much similarity may decrease the variety of ideas and processes needed in decision-making group performance, and so a balance is needed between the necessary level of fit in order to produce positive outcomes and the appreciation of different employee needs (Schneider, 1985, 1987). Thus, it is important for organisations to have a diverse focus in meeting the different needs of generational groups in order to be attractive to all employees. Appealing to different employees will also allow organisations to remain competitive rather than becoming homogenous in terms of thinking, decision making and action (Miller, 1990; Schneider, 1985). Overall, developing and communicating a strong organisational value statement, that encompasses a diverse number of values to meet the needs of different employees, and combining this with good recruiting and

assessment techniques, can help reduce employee turnover and recruitment costs for the company (Bryce, 2002).

4.5 Concluding Comments

As both the median working age and life expectancy continue to rise, the workplace must continue to change to include all employees (Barnes, 2002). By understanding the differences and similarities between generational groups, human resource professionals and managers can use this information for the development of policies and to aid interpersonal communication between staff (Saba, Guerin & Wils, 1998). Such policies can help improve job satisfaction, organisational commitment, and employee retention, and increase organisational knowledge management and productivity (Saba et al., 1998; Zemke et al., 2000).

Awareness of the work values of a particular generation can be valuable, as knowledge of generational differences should enhance interaction between age groups. Identifying how particular generations may differ according to work-related outcomes and P-O values fit can also help to further understand the dynamics of these groups. It is important that an organisation clearly communicates values and priorities so an assessment of fit can be made. Understanding such differences between generational groups at work is a useful first step in meeting diverse employee needs. It is important to continue the examination of generations in the workplace and apply this knowledge to managerial practices so that communication and understanding can be enhanced.

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APPENDIX A

Date Boundaries and Names used to describe Generations in Previous Studies

Table A-1. Examples of date boundaries and names used to describe generations in previous studies

Author	Name Given	Birth Years	Age Span (2005)
Lancaster and Stillman (2002)	Traditionalists	1900-1945	60 and over
	Baby Boomers	1946-1964	41-59
	Generation Xers	1965-1980	25-40
	Millennials	1981-1999	24 and under
Zemke, Raines and Filipczak (2000)	Veterans	1922-1943	62-83
	Baby Boomers	1943-1960	45-62
	Xers	1961-1980	25-44
	Nexters	1981-1999	24 and under
Smola and Sutton (2002)	WW II-ers	1909-1923	82-96
	Swingers	1934-1945	60-71
	Boomers	1946-1964	41-59
	Generation X	1965-1977	28-40
	Millennials	1978-1995	10-27
Howe and Strauss (2000)	Veterans	1925-1942	63-80
	Boom	1943-1960	45-62
	Generation X	1961-1980	25-44
	Millennials	1981-2002	24 and under
Foot (1998)	Pre-World War I	1914 & earlier	91 and older
	World War I	1915-1919	86-90
	Roaring Twenties	1920-1929	76-85
	Depression Babies	1930-1939	66-75
	World War II	1940-1946	59-65
	Baby Boom (incl. Generation X born 1961-1966)	1947-1966	39-58
	Baby Bust	1967-1979	26-38
	Baby Boom Echo	1980-1995	10-25
	Millennium Busters	1996-2010	9 and under
Adams (1998)	Elders	< Mid 1940s	60 and older
	Boomers	1945-mid 1960s	40~60
	Gen Xers	Mid 1960s-early 1980s	25~39

APPENDIX B

Research Questionnaire for the Present Study



Massey University

Work Values in New Zealand Organisations

2005

Thank you for agreeing to participate in our survey. Please read the information sheet before answering the questions below. Please do not write your name on this survey as the information you provide is completely anonymous. Please be frank and open in answering these questions.

N.B. In this survey, the word "organisation" refers to the company for which you currently work.

SECTION A: Please indicate how satisfied or dissatisfied you feel with each of the following aspects of your work using the key below. Please circle the number which best represents the way you feel.

	Very Dissatisfied	Dissatisfied	Neither	Satisfied	Very Satisfied
1. The physical work conditions	1	2	3	4	5
2. The freedom to choose your own method of working	1	2	3	4	5
3. Your fellow workers	1	2	3	4	5
4. The recognition you get for good work	1	2	3	4	5
5. Your immediate boss	1	2	3	4	5
6. The amount of responsibility you are given	1	2	3	4	5
7. Your rate of pay	1	2	3	4	5
8. Your opportunity to use your abilities	1	2	3	4	5
9. Industrial relations between management and workers	1	2	3	4	5
10. Your chances of promotion	1	2	3	4	5
11. The way the organisation is managed	1	2	3	4	5
12. The attention paid to suggestions you make	1	2	3	4	5
13. Your hours of work	1	2	3	4	5
14. The amount of variety in your job	1	2	3	4	5
15. Your job security	1	2	3	4	5
16. Now, taking everything into consideration, how do you feel about your job as whole?	1	2	3	4	5

SECTION B: The items below represent values that people may consider to be important in their work. We are asking you to consider to what extent each of these values is a top priority for you in your work.

Please carefully read the following items and indicate (1) to what extent is each item a top priority for you in your work and (2) to what extent you feel your organisation provides you with each item.

	To what extent is each item a TOP PRIORITY for you in your work?					To what extent does your ORGANISATION PROVIDE YOU with each item?				
	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent
1. A sense of ACHIEVEMENT in work	1	2	3	4	5	1	2	3	4	5
2. Opportunity for ADVANCEMENT ; chances for promotion	1	2	3	4	5	1	2	3	4	5
3. BENEFITS e.g. bonuses, insurance etc.	1	2	3	4	5	1	2	3	4	5
4. COMPANY ; to be employed by a company for which you are proud to work	1	2	3	4	5	1	2	3	4	5
5. Being able to make a CONTRIBUTION to society	1	2	3	4	5	1	2	3	4	5
6. CONVENIENT hours of work	1	2	3	4	5	1	2	3	4	5
7. CO-WORKERS who are pleasant and agreeable	1	2	3	4	5	1	2	3	4	5
8. ESTEEM ; feeling like you are valued as a person	1	2	3	4	5	1	2	3	4	5
9. Being provided with FEEDBACK about your performance	1	2	3	4	5	1	2	3	4	5
10. INDEPENDENCE at work to make your own decisions	1	2	3	4	5	1	2	3	4	5

	To what extent is each item a TOP PRIORITY for you in your work?					To what extent does your ORGANISATION PROVIDE YOU with each item?				
	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent
11. INFLUENCE in the organisation	1	2	3	4	5	1	2	3	4	5
12. INFLUENCE in your work	1	2	3	4	5	1	2	3	4	5
13. INTERESTING work	1	2	3	4	5	1	2	3	4	5
14. JOB SECURITY	1	2	3	4	5	1	2	3	4	5
15. JOB STATUS	1	2	3	4	5	1	2	3	4	5
16. Work that you find FULFILLING	1	2	3	4	5	1	2	3	4	5
17. The opportunity to LEARN and develop new knowledge and skills	1	2	3	4	5	1	2	3	4	5
18. Being able to MEET PEOPLE and interact with them	1	2	3	4	5	1	2	3	4	5
19. The amount of PAY you receive	1	2	3	4	5	1	2	3	4	5
20. RECOGNITION for a job well done	1	2	3	4	5	1	2	3	4	5
21. RESPONSIBILITY	1	2	3	4	5	1	2	3	4	5
22. A fair and considerate SUPERVISOR or MANAGER	1	2	3	4	5	1	2	3	4	5
23. Using your ABILITY and KNOWLEDGE	1	2	3	4	5	1	2	3	4	5
24. Comfortable, clean and safe WORK CONDITIONS	1	2	3	4	5	1	2	3	4	5

	To what extent is each item a TOP PRIORITY for you in your work?					To what extent does your ORGANISATION PROVIDE YOU with each item?				
	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent
25. Work that is INTELLECTUALLY STIMULATING	1	2	3	4	5	1	2	3	4	5
26. Work that involves CREATIVITY	1	2	3	4	5	1	2	3	4	5
27. A setting where policies are administered FAIRLY	1	2	3	4	5	1	2	3	4	5
28. An environment which is lively and FUN	1	2	3	4	5	1	2	3	4	5
29. Work that allows you to BALANCE your work and private life	1	2	3	4	5	1	2	3	4	5
30. Work that is CONSISTENT with your moral values	1	2	3	4	5	1	2	3	4	5
31. Work that provides change and VARIETY	1	2	3	4	5	1	2	3	4	5
32. Work that allows you to TRAVEL	1	2	3	4	5	1	2	3	4	5
33. TEAMWORK	1	2	3	4	5	1	2	3	4	5
34. Projects that CHALLENGE your abilities	1	2	3	4	5	1	2	3	4	5
35. Work which is HIGHLY REGARDED by others	1	2	3	4	5	1	2	3	4	5
36. Feeling PRIDE IN CRAFTSMANSHIP in your work	1	2	3	4	5	1	2	3	4	5

	To what extent is each item a TOP PRIORITY for you in your work?					To what extent does your ORGANISATION PROVIDE YOU with each item?				
	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent	Not At All	A Little	To Some Reasonable Extent	To a Very Considerable Extent	To the Highest Possible Extent
37. TECHNOLOGY to keep up with the demands of your work	1	2	3	4	5	1	2	3	4	5
38. A setting where rewards are based on COMPETENCE	1	2	3	4	5	1	2	3	4	5
39. A setting that encourages OPTIMISM	1	2	3	4	5	1	2	3	4	5
40. Being able to WORK ALONE without relying on others	1	2	3	4	5	1	2	3	4	5

Please tick the box that best represents the way that you feel

41. To what extent do you feel your values 'match' or fit your organisation and the current employees within your organisation?

☐ Not at All

☐ A Little

☐ To Some Reasonable Extent

☐ To a Very Considerable Extent

☐ To the Highest Possible Extent

SECTION C: Listed below are a series of statements that represent possible feelings people might have about the organisation for which they work. Please circle the number which best represents the way you feel about your current organisation

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful	1	2	3	4	5
2. I describe this organisation to my friends as a great organisation to work for	1	2	3	4	5
3. I would accept almost any type of job assignment in order to keep working for this organisation	1	2	3	4	5
4. I find that my values and the organisation's values are very similar	1	2	3	4	5
5. I am proud to tell others that I am part of this organisation	1	2	3	4	5
6. This organisation really inspires the very best in me in the way of job performance	1	2	3	4	5
7. I am extremely glad that I chose this organisation to work for over others I was considering at the time I joined	1	2	3	4	5
8. I really care about the fate of this organisation	1	2	3	4	5
9. For me, this is the best of all possible organisations for which to work	1	2	3	4	5

SECTION D: We are interested in gathering demographic information, particularly about generational groupings and gender. Please tick the relevant box

1. What is your gender?

☐ Female

☐ Male

2. In what year were you born?

☐ Born 1945 and earlier

☐ Between 1962 -1970

☐ Between 1946 -1953

☐ Between 1971 - 1979

☐ Between 1954 – 1961

☐ Born 1980 and later

3. What is your highest education level?

- | | |
|---|---|
| <input type="checkbox"/> Less than School Certificate | <input type="checkbox"/> Technical Tertiary (Certificate/Diploma) |
| <input type="checkbox"/> School Certificate | <input type="checkbox"/> University Undergraduate Degree |
| <input type="checkbox"/> Sixth Form Certificate | <input type="checkbox"/> University Postgraduate Qualification |
| <input type="checkbox"/> University Entrance or Bursary | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Trade Certificate | |

4. How long have you been with this organisation? Years: _____ Months: _____

5. How long have you been in your current job with this organisation?

Years: _____ Months: _____

6. What is the level of your current job?

- | | |
|--|---|
| <input type="checkbox"/> Senior Manager | <input type="checkbox"/> Waged Worker |
| <input type="checkbox"/> Middle Manager | <input type="checkbox"/> Qualified Tradesperson |
| <input type="checkbox"/> Supervisor/Team Leader | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> Salaried staff without direct reports | |

7. Is your job? Please tick all that apply

- | | |
|------------------------------------|------------------------------------|
| <input type="checkbox"/> Full Time | <input type="checkbox"/> Part time |
| <input type="checkbox"/> Temporary | <input type="checkbox"/> Contract |

SECTION E: The following statements ask you how you feel about your present job, compared with alternative jobs that you may be interested in or able to obtain. Please tick the box that best represents the way that you feel.

1. Thoughts about quitting this job cross my mind.

- | | |
|------------------------------------|---------------------------------------|
| <input type="checkbox"/> Never | <input type="checkbox"/> Often |
| <input type="checkbox"/> Rarely | <input type="checkbox"/> Very Often |
| <input type="checkbox"/> Sometimes | <input type="checkbox"/> All the time |

2. I plan to look for a new job within the next 12 months.

- | | |
|--|---|
| <input type="checkbox"/> Strongly Disagree | <input type="checkbox"/> Slightly Agree |
| <input type="checkbox"/> Moderately Disagree | <input type="checkbox"/> Moderately Agree |
| <input type="checkbox"/> Slightly Disagree | <input type="checkbox"/> Strongly Agree |

3. How likely is it that, over the next year, you will actively look for a new job outside of this organisation?

- | | |
|--|--|
| <input type="checkbox"/> Very Unlikely | <input type="checkbox"/> Somewhat Likely |
| <input type="checkbox"/> Moderately Unlikely | <input type="checkbox"/> Moderately Likely |
| <input type="checkbox"/> Somewhat Unlikely | <input type="checkbox"/> Very Likely |

The following questions are about absence from work over the past 12 months. Please fill in the blanks below.

4. In the last 12 months I have had _____ days off for certified sickness
5. In the last 12 months I have had _____ days off for uncertified sickness
6. In the last 12 months I have had _____ days off for family obligations
7. In the last 12 months I have had _____ days off for holidays
8. In the last 12 months I have had _____ days off for other reasons (e.g. personal affairs, tangihanga etc.)

Thank you very much for taking the time to participate in our study!

Please check that you have answered all questions you wish to complete

APPENDIX C

Work Values Measures reviewed for Lyons's (2004) 'Work Values Scale'

Table C-1. Work values measures reviewed for Lyons's (2004) 'Work Values Scale'

Author(s) / Year	Measure
Elizur (1984)	Work Values Questionnaire
Gay, Weiss, Hendel, Dawis and Lofquist (1971)	Minnesota Importance Questionnaire
Super (1970)	Work Values Inventory (WVI)
Manhardt (1972)	Manhardt Scale
Billings and Corneliuss (1980)	Work Outcomes Measure
Jurgensen (1978)	Job Preferences Form
Pryor (1979)	Work Aspect Preference Scale (WAPS)
Harrington and O'Shea (1989)	Harrington-O'Shea Career Decision-Making System
McKeen and Beatty (1992)	Generation X Value Survey
Mason (1994)	Work Values Survey
England, Ruiz-Quintanilla and Maimor (1995)	Meaning of Working (MOW) Survey
Sagie, Elizur and Koslowsky (1996)	Personal Value Questionnaire

APPENDIX D

Hypothesised Factor Structure and Associated Work Value Items for the ‘Generational Work Values Scale’ (2005)

Table D-1. Hypothesised factor structure for the Generational Work Values Scale (2005)

Extrinsic	Intrinsic	Status	Social	Altruism	Freedom
Benefits	Intellectually stimulating	Regarded work	Pleasant and agreeable co-workers	Moral values	Convenient hours of work
Salary	Challenge	Travel	Esteem	Contribution to society	Work/life balance
Job security	Interesting work	Recognition	Meet people	Fair policies	Work alone
Work conditions	Learn and develop	Influence in the organisation	Teamwork		Fun
Rewards based on competence	Fulfilling work	Influence in work	Fair and considerate supervisor/manager		
Technology	Achievement	Job status			
	Use abilities and knowledge	Responsibility			
	Variety	Advancement			
	Creativity	Independence			
	Feedback	Pride in Company			
	Pride in Craftsmanship				
	Optimism				

APPENDIX E

An Example from a Section of the Web-based Version of the Questionnaire

SECTION C

Listed below are a series of statements that represent possible feelings people might have about the organisation for which they work. Please select the item on the rating scale which best represents the way you feel about your current organisation

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
I am willing to put in a great deal of effort beyond that normally expected in order to help this organisation be successful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I describe this organisation to my friends as a great organisation to work for	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would accept almost any type of job assignment in order to keep working for this organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that my values and the organisation's values are very similar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am proud to tell others that I am part of this organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This organisation really inspires the very best in me in the way of job performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am extremely glad that I chose this organisation to work for over others I was considering at the time I joined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really care about the fate of this organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For me, this is the best of all possible organisations for which to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please check that you have answered all questions that you wish to complete on this page

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APPENDIX F

Consent Form for Organisations to be involved in the Present Research

CONSENT FORM
PERMISSION TO PARTICIPATE IN RESEARCH

Title: Work Values in New Zealand Organisations
Researchers: Lucy Cennamo and Dr Dianne Gardner

I have been given and understand the explanation of this research project. I have had an opportunity to ask questions and have them answered.

- I grant my permission for my/our employees to take part in the questionnaire involved in this research.

Signed: Date.....

Name:.....
(Please print clearly)

Job Title:.....
(Please print clearly)

Company/Organisation:.....

APPENDIX G

Additional Information about Online Data Collection

Online Data Collection for Research Purposes

Online data collection for questionnaire research has become increasingly popular in order to: (1) minimise disruption to organisations; (2) allow data to be collected as efficiently as possible; and (3) reduce costs (Joinson, 1999). Data collection through the internet has also been academically and scientifically supported. For instance, there is a forthcoming book related to this area: Joinson, A.N., McKenna, K., Postmes, T., & Reips, U-D. (Eds.) (In preparation). *Oxford Handbook of Internet Psychology*. Oxford University Press, and there are two existing web pages containing a list of recent studies: *Psychological Research on the Net* and *The Web Survey List*.

A number of studies have suggested that participants are generally open to, and accept online surveying, and research has received comparable, if not better, rates of return than pencil and paper-based questionnaires (e.g. Knapp & Kirk, 2003; Thompson, Surface, Martin & Sanders, 2003). Other findings have shown that responding to online questionnaires, when assured of anonymity, increased the likelihood of honest responding and disinhibited behaviour due to increased private self-awareness and decreased concern of others opinions when compared with pencil and paper versions (Joinson, 1999; Matheson & Zanna, 1988). This in turn can lead to a reduction in social desirability using online data collection.

There are also potential disadvantages to collecting data via the internet. With regards to survey research, these can include sample bias resulting from differential access to and familiarity with computers, and in the work situation, difficulty ensuring privacy (Ferrando & Lorenzo-Seva, 2005). However, the advantages are generally considered to outweigh the disadvantages (see Barak & English, 2002 for a detailed review).

APPENDIX H

Email Introduction for Web-Based Data Collection

Email Introduction for Web-Based Data Collection

Hi there,

My name is Lucy Cennamo and I am studying for my MA degree at Massey University. I am looking at work-related values and outcomes in New Zealand organisations and (*name of company*) has allowed me to invite you to take part in my research.

If you would like to take part, please click on the following link (www.relevantdatabase.numbersurveymonkey.com). This will take you to the questionnaire. It takes less than 20 minutes to complete. If you prefer, the questionnaire is also available in pencil and paper format which can be collected from (*name of manager*) and returned to me via a freepost envelope.

Your answers will be completely anonymous so please don't put your name on the questionnaire. Please complete the questionnaire by *Friday the 3rd of June 2005*.

If you would like to know the results of the research, a summary report of research findings can be requested from me in late August 2005 by emailing lucyc@woosh.co.nz. Also, help yourself to the confectionary a thank you! (*where the confectionary was situated*).

If you have any questions about this study please contact me on lucyc@woosh.co.nz

Thank you for your support,

Lucy Cennamo

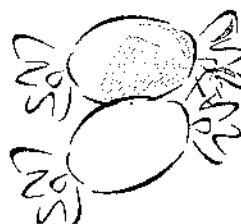
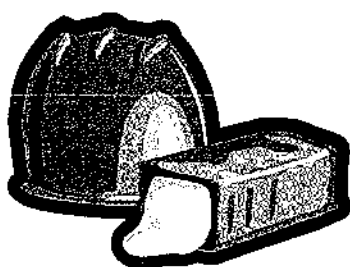
APPENDIX I

Questionnaire Advertisement Wall-Poster

SURVEY FOR SWEETS!

**THANKING YOU FOR YOUR
PARTICIPATION!**

**A Massey University research survey
will be arriving in your inbox today.
Complete it and reward yourself with a
sweet treat!**



**A summary of the research findings will also be
available from the researcher (Lucy Cennamo:
lucyc@woosh.co.nz) in late August.**

If you prefer, the survey can also be completed via **pencil and paper**. Just request a
copy from (*name of manager*)

APPENDIX J

Participant Information Sheet (Web-Based Version)

PARTICIPANT INFORMATION SHEET

Work Values in New Zealand Organisations

Researcher Introduction

My name is Lucy Cennamo and I am currently working towards a Master of Arts degree in Organisational Psychology at Massey University, Albany. Along with my supervisor, Dr Dianne Gardner, I hope to examine differences in work-related values and outcomes among employees in New Zealand across various groups. The world of work has changed considerably over the past 25 years, and the information gathered will be useful for designing policies and programs to meet the needs of current employees. These programs can help improve employee retention, job satisfaction, productivity and employee relations.

Participant Recruitment

This study is being carried out by Massey University and your organisation has given me permission to ask you to take part. All employees from your organisation/company have been invited to participate. Your agreement or refusal to participate in this study will not affect your job. There are also a number of other Auckland organisations involved in the research.

Project Procedures

All participants will remain anonymous and individual questionnaire responses will be kept confidential. The data will be stored in a secure database (www.surveymonkey.com) which only the researchers will have access to. If you would like to know the results of the research, a summary report of research findings can be requested from me by emailing lucyc@woosh.co.nz in late August 2005.

Participant Involvement and Consent

Participation in this research will involve the completion of an online questionnaire. Completion of this questionnaire will be taken as consent to be involved in the research. Please complete the questionnaire before *Friday the 3rd of June 2005*. It will take approximately 20 minutes to complete.

Participant's Rights

Completion of the questionnaire implies consent to take part in this study. You have the right to decline to answer any particular question.

Project Contacts

Please do not hesitate to contact me if you have any concerns regarding this research. I can be contacted via email on lucyc@woosh.co.nz. You are also welcome to contact my supervisor, Dianne Gardner on D.H.Gardner@massey.ac.nz or (09) 414 0800 x 9034.

Committee Approval Statement

This project has been reviewed and approved by the Massey University Human Ethics Committee, ALB Application MUAHEC 05/012. If you have any concerns about the conduct of this research, please contact Associate Professor Kerry Chamberlain, Chair, Massey University Campus Human Ethics Committee: Albany, telephone 09 414 0800 x 9078, email: humanethicsalb@massey.ac.nz.

APPENDIX K

Participant Information Sheet (Pencil and Paper-Based Version)

PARTICIPANT INFORMATION SHEET

Work Values in New Zealand Organisations

Researcher Introduction

My name is Lucy Cennamo and I am currently working towards a Master of Arts degree in Organisational Psychology at Massey University, Albany. Along with my supervisor, Dr Dianne Gardner, I hope to examine differences in work-related values and outcomes among employees in New Zealand across various groups. The world of work has changed considerably over the past 25 years, and the information gathered will be useful for designing policies and programs to meet the needs of current employees. These programs can help improve employee retention, job satisfaction, productivity and employee relations.

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Project Procedures

All participants will remain anonymous and individual questionnaire responses will be kept confidential. The questionnaires will be held securely and only my supervisor and I will have access to them. If you would like to know the results of the research, a summary report of research findings can be requested from me by emailing lucyc@woosh.co.nz in late August 2005.

Participant Involvement and Consent

Participation in this research will involve the completion of the attached questionnaire. Please return this by either dropping it in the secure drop box in the lunch room; sealing it in the envelope provided and posting it via mail; or handing it directly to me before *Friday the 3rd of*

June 2005. Completion of this questionnaire will be taken as consent to be involved in the research. It will take approximately 20 minutes to complete.

Participant's Rights

Completion and return of the questionnaire implies consent to take part in this study. You have the right to decline to answer any particular question.

Project Contacts

Please do not hesitate to contact me if you have any concerns regarding this research. I can be contacted via email on lucyc@woosh.co.nz. You are also welcome to contact my supervisor, Dianne Gardner on D.H.Gardner@massey.ac.nz or (09) 414 0800 x 9034.

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APPENDIX L

Discussion of the Purposes and Advantages of Structural Equation Modelling

Structural Equation Modelling: Purposes and Advantages

Structural Equation Modelling (SEM) involves a number of statistical techniques which takes a hypothesis testing approach to model analysis using both theory, research and statistical evidence (Byrne, 2001). It can be thought of as an extension of multiple regression, but is a more powerful approach as SEM takes into account such influences as interactions, correlated independents, measurement error and correlated error terms (Garson, 2005). A model is made up of a number of latent variables (conceptual constructs), which are comprised of multiple manifest variables and are presented in diagrammatic form to represent the hypothesised paths. Kline (1998) provided a technical explanation where a structural equation model displays and tests a hypothesised pattern of directional and non-directional linear relationships among a set of manifest and latent variables.

The main purpose of a structural model is to account for the variation and co-variation amongst the manifest variables, and the adequacy of the model can be determined by the fit of the obtained covariance matrix with the implied covariance matrix (Byrne, 2001). In basic terms, SEM techniques determine whether the hypothesised model is consistent with the data. If good fit is shown, it is then possible to propose directional relationships between variables. Although being viewed as a confirmatory rather than an exploratory procedure, SEM cannot infer causality (Byrne, 2001; Garson, 2005). Thus, the consistency of the model with the data provides support of a theory, but does not constitute proof (Pedhazur, 1982). For instance, is it possible that two competing models are consistent with the data, but the choice of which to employ depends on the theory and research evidence from which the model was generated, as well as the data itself (Garson, 2005).

There are a number of advantages for using the SEM process. These include: (1) being able to analyse psychological constructs without absorbing measurement error; (2) being able to assess the relative contribution of each indicator to its associated latent construct; (3) allowing for a more thorough analysis by assessing latent variables for the combination of similarly related items; (4) allowing for mediating variables to be modelled and tested; and finally (5) there is an emphasis on model fit where the researcher is able to respecify the model to obtain a stronger fit with the data (Byrne, 2001; Garson, 2005; Wright, 2005). As SEM takes a confirmatory rather than an exploratory approach, it is well suited to the assessment of data for hypothesis testing purposes. Accordingly, Byrne (2001) states that SEM is a popular method for non-experimental research where it is impossible to infer causality and the basis of such investigations are on theory testing. Thus, it was an appropriate method for the analysis of data for the present study.